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The Rifle 1885, Shooting & Fishing 1888, Arms & the Man 1906

VOLUME LXXII NUMBER 24

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THE KENTUCKY RIFLE

By J. G. W. DILLIN

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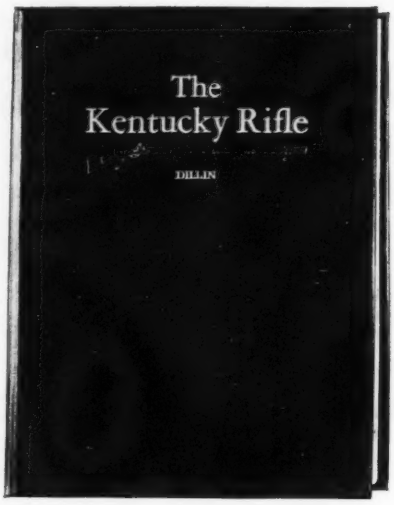

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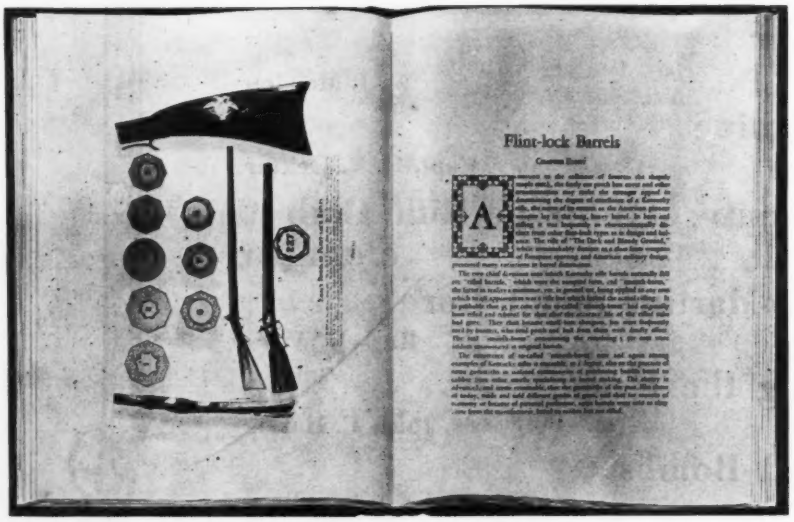
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The AMERICAN RIFLEMAN

The Publication of the National Rifle Association of America

Entered as second-class matter, April 1, 1908, at the Postoffice at Washington, D. C., under Act of Congress of March 3, 1879

VOL. LXXII, No. 24 WASHINGTON, D. C., MAY 15, 1925 $3.00 a Year. 20 Cents a Copy

Face to Face with the Boy We Used to Be

By Charles Askins

DO NOT expect any wisdom here unless it is supplied by the reader who may do some thinking. I never do any avoidable thinking.

We all know that man is father to the boy, and somebody has said that the boy is father to the man. Both are true I suppose. Somebody else has said that the young of humanity pass through the various stages of human existence, being now a monkey, now an ape, now a beast of prey, and now a man. Previous to reaching the estate of a man he is a boy and a great idealist. We are to write of him.

Any of us can look back and remember that as boys of sixteen we were pretty darned fine fellows. Maybe life had already turned us a bit from the straight road, but probably not. Most likely we were honest and upright and straightforward and square, at least theoretically. Most likely we had a fine contempt for lying, for dishonesty, for cheating, for immorality —for every human frailty in man or woman. We had the greatest appreciation of physical courage, moral courage, heroism, self-sacrifice. The man who measured up to our standards must be a Richard the Lion-Hearted, lacking his weakness, or a Roosevelt, lacking nothing.

Would you like to meet that boy you used to be, all alone, face to face in the middle of the road? Would you like to confess to him all the thing that you had done since parting company this many years ago? Would you like to meet his level glance in critical judgment—a glance that read you and read all the things that you had done since he fathered you and trusted you a long time ago? Do you suppose he would commend you and that he would say, "Son, I am proud of you; you have done well"? Do you suppose that any of us could stand face to face with the boy we used to be and not apologize to him, not make lame excuses for all the things we had done? Mightn't he look upon us sorrowfully as having betrayed all the great hopes he had for us?

The boy expected us to develop, to become a man, to become just the sort of man he had planned for us to be. The things that he could not do then, maybe from physical weakness, maybe from lack of knowledge, maybe from lack of opportunity, we would do presently. Ah, me! All the fine things and the great things that he had planned for us to do! Did we accomplish all the things that this father of ours expected us to do? Ah, no!

Being a reasonable and reasoning lad, this boy that we used to be, we can explain some things to him and he will understand. We might tell him of the hard fight that mere existence in the world entails. We might tell him of the need for fighting with the weapons which the other man carried—of fighting a sword with a sword, of fighting a club with a club, of fighting deceit with deception—and being the boy that we used to be, he might understand.

But if he read in our face the marks of dissipation, of grossness, of deceit, of selfishness, of sensuality, he would never understand and never forgive—being the boy that we used to be. And if we had ever used strength to overcome weakness in man or woman, or if we had ever used a lie to controvert the truth, he would never forgive us—being the boy that we used to be.

Some things we may have done which would be commended by this boy that we used to be. If we had joined the armed forces of our country in time of need, I think he would like that. If we had been a shooting man or a rifleman, among the best, I think he would like that, too. And if we had been fair and considerate of all lesser things of which we took toll, that would please him. Perhaps with all the weakness that we had shown, despite every failure that we had made, if we had kept a stiff upper lip, if we had met life stoutly, afraid of nothing, fearing no man, the boy that we used to be might shake hands with us and smile ere he went back to the home where dead idealists go.

Yes, the boy is dead—none so dead as he. If he came back to earth no one would know him, not even we who live in his stead. If we met him face to face in the middle of the road we would not know him, nor claim kinship. Only his mother would know him, know him far better than she does you or me. Where has the wraith of that boy gone? Maybe to heaven, for which he was far better fitted than you or I.

Can the Larger Bores Come Back?

By J. V. K. Wagar

TO Mr. Albertson's article, "Will the Larger Bores Come Back?" there seems but one answer: Can the larger bores come back? For me or for anyone else to prophesy that they will not come back is worse than foolishness, but, in spite of all my liking for the larger bores, I do not believe that they will ever again be as common as they were twenty or thirty years ago.

In one sense the larger bores have never left us. Rifles are now made for .38-55, .38-40, .44-40, .35-W.C.F., and .405-W.C.F., the .35 and .400 Whelen and several larger bores made by Hoffman. Not only are these arms still made but it seems quite certain that most of them will be with us for many years. With all these, and with many excellent arms in the .40, .44, and .45 calibers left over from a decade or two ago, the outlook for the large bore enthusiast is not as dismal as it may now seem.

In black powder days bullet velocities were seldom higher than 1,600 feet per second and were usually somewhat less. Nor could they be made much greater than this. Many attempts were made to give high velocities to such cartridges as the .45-70-500 and .50-100-450 by changing their components until they were the .45-90-300 and .50-110-300. But these attempts, although popular, were far from being all that could be desired. The additional velocities obtained were never as great as would result from a similar increase of powder and decrease of lead in modern smokeless powder cartridges; the accuracies were poorer at all ranges; the velocities but little higher at the end of one hundred yards; and the bores fouled much worse. Moreover, for really dangerous game, such lightened bullets were not as effective as the heavier bullets of the cartridges upon which they were meant to be an improvement. The .38-90-217 would have been better had it been made a .38-90-255, the .45-90-300 a .45-90-405, and the .50-110-300 a .50-110-450. In other words a given amount of black powder will move any reasonable amount of lead about as fast as it will move a slightly lighter amount, and it is rather doubtful if a half pound of black powder would give much higher velocities to a .45 caliber 550-grain bullet than would 120 grains of black powder. This is just the nature of the stuff. With black powder any additional powder charge is worth while whenever a bullet propelled by it has a velocity of less than 1,500 feet per second, but the use of lightened bullets to secure a higher velocity is nothing short of a crime.

Penetrations in those days had much in common with velocities; they were all about the same for the better cartridges. The things making for greatest penetration are high velocities, bullets of high sectional densities, hardened or protected bullet metal, and a well-shaped bullet point. In black powder days there were no high velocities as we think of them today; barrels were not made with sufficiently rapid twists to keep extremely long, heavy bullets point on because of the tendency of such rapid twists to strip soft lead bullets and to foul rapidly; bullets were not metal jacketed and were seldom harder than a twelve to one mixture of lead and tin; and pointed bullets of soft lead were too easily damaged and could not be used in the tubular magazines of those days. Most bullets of that period were flat nosed or bluntly rounded, and only one—the 550-grain .45 Sharp's Special bullet—had an outline similar to the most perfect of our modern bullets.

Finally, since velocities and penetrations were limited to about 1,600 foot seconds and 20 inches of wood, better killing cartridges depended entirely upon an increase in caliber, keeping always a proper balance of powder and bullet weight to insure the maximum velocity and penetration possible with black powder and lead bullets.

Today, however, all is changed. With better powders, better barrel and bullet metals, and with more skilled men and machinery making our rifles and ammunition, we can have almost anything we desire in the way of rifles and cartridges. We are no longer dependent upon a larger caliber to secure the maximum amount of killing power, but we can use velocity, sectional density ,and a proper combination of metal and bullet design to give us good trajectory, good killing power, and good accuracy with almost any caliber we desire. For the largest and most dangerous animals, and for smaller animals which are particularly hard to kill, a large bore rifle possessing a good velocity, good bullet weight and good bullet construction is a desideratum not to be scorned, but for most of the shooting done in this country, by the average sportsman, somewhat smaller bores are usually sufficient.

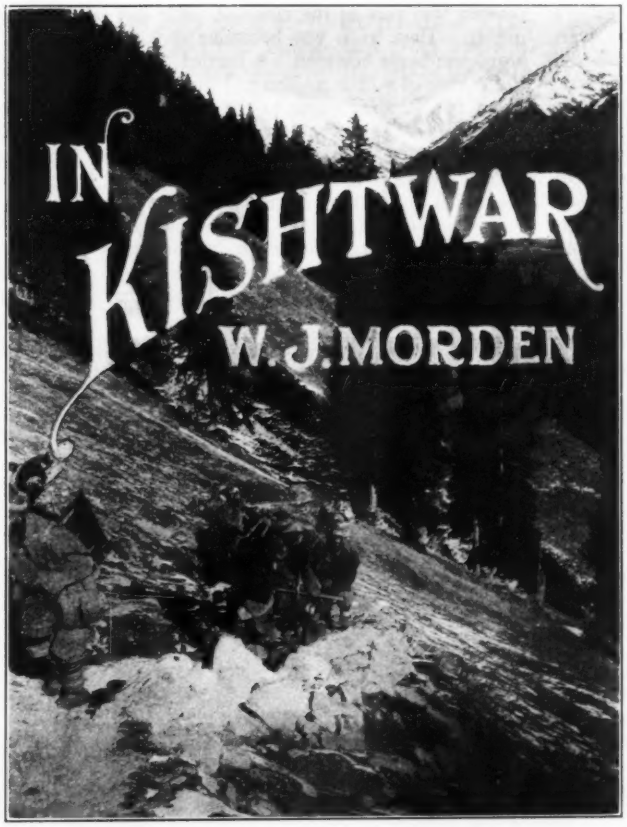
Today there are many States having no large game of any description which may be legally shot, although there are not more than five States in the Union which could not easily support some kind of large game for its hunting citizenry. Citizens of such States are dependent upon other regions for their large game shooting and, I dare say, the big game hunters in such States—men who have at one time or other shot at big game—will not average more than one shot a year at such game. Even in States having open seasons on big game, hunters will average only a very few shots a year at deer or other large game. In Colorado, which has an annual open season on deer, I know of good hunters who have gone hunting for as many as three seasons consecutively with never a shot at deer. This, however, may not be a fair comparison since a few States with as much good game cover and with as small a population have as little big game as Colorado.

The day of the market hunter and of the man who can rightfully depend upon wild game for his meat are past; and in practically every part of these United States one can live with entire safety in the wildest of the remaining wildernesses with no more protection than a penknife can afford. In the Rocky mountains the only common existing dangers are the rocks rolled down hill by the tourists and the bullets which stray around through the woods when some young village cutthroats mistakes a rancher's collie for a gray wolf.

In a few words, the only time when most of us need a really big bore rifle is during one of those rare intervals when business, finances, and the womenfolk are willing to grant us a respite in the affairs of this tumultuous planet. Those of us who live in good game countries need them only during the short periods decreed by law and by the common decency which causes all good sportsmen to observe such laws. For most uses our only need is for a rifle which will kill sparrows, hawks, groundhogs, barn and pack rats, prairie dogs and each other's cats with neatness and without undue expense or danger to the surrounding country. Indeed, most of us must ride some distance before we can fire anything more dangerous than a furnace.

I have long been a large bore and high power enthusiast and, among the eighteen or twenty rifles I now own, the .38-40's and .38-55's are in the kindergarten class. I have owned dozens of other rifles and hope to own dozens more but, in all honesty and seriousness, all of my hunting needs could be covered by three rifles; four if I lived in a country of thick timber with resulting short shots at large game. Hunting needs, mind you. It takes no particular caliber or energy to kill a target. All that is needed for target uses is a bullet that will get to wherever the rifle is pointed. And for military uses all that is needed is a rifle and ammunition which are able to tag your little playmates at a greater distance than they can tag you.

The first rifle needed is a handy knock about rifle which is light enough to be carried on any sort of trip and is still heavy enough to be more than a plaything. From six to seven pounds will be about right. This rifle will be used on squirrels, rabbits, owls, hawks, gophers, woodchucks, and other small game and vermin of their kind. It must be exceedingly accurate, simple, durable, reliable, inexpensive to shoot, and fully able to kill such animals and birds at any range at which they may be discerned over strong but accurate sights. The .22 long rifle cartridge is not powerful enough for the largest of these, nor even for the smaller animals unless they are hit in the head or heart. This rifle should, at the same time be capable of firing a cartridge large enough to secure coyotes or bob cats at long ranges and even deer and black bear at short and medium ranges, should the necessity ever arise. (*Concluded on page 17*)



IN KISHTWAR

W. J. MORDEN

THE game in Kishtwar, which includes the district known as Wardwan, comprises ibex, stag, black and brown bear, tahr, goral and serow. Although several of these animals may be found in the hills near Srinagar, a shoot of from two weeks to a month in the mountains of Kishtwar is worth while, for not only are better heads found there, but the country is pleasant and travel not difficult. Good ibex are scarce, however, so for these animals one should, if time permits, make a trip into Baltistan.

In most parts of Kishtwar there are excellent pony trails, but as it is not easy to obtain sufficient pack animals in many places, coolies must frequently be used. These men are quite different in appearance from the Baltis, and their language, which I was told is practically the same as Kashmiri, though pronounced differently, is a truly amazing series of sounds.

Much of Kishtwar reminds one of the northern Rockies, for as it lies south of the main Himalayan range, rainfall is abundant and forests of spruce, pine and deodar clothe the lower slopes. Timber line is between 12,000 and 13,000 feet, depending on the face of the slope. The trails, though often somewhat steep, are usually through timber, a welcome variation from the barrenness of Baltistan and Ladakh. No less pleasant are the camp sites one finds, nearly always in timber and close beside streams of crystal clear water. It is a much more smiling land than that beyond the mountains.

From Srinagar there is a good motor road for the first forty miles to Achabal. From there one uses pony transport to a small village near the south approach to Morgan Pass, where coolies are obtained for the remainder of the journey to the Wardwan valley. As I had sent my outfit directly to Wardwan from Ladakh, retracing my route into the latter country, my cook and I travelled light from Srinagar to rejoin them. We had no equipment with us, so were forced to spend one night in a native house, an experience that I do not regret, now that it is past. But I would hardly try it again, were there any way to avoid it. I shall not go into details, except to say that it took me about a week to rid myself of the dense population I collected in the few hours spent on the floor of an upper room.

Title cut shows the coolies climbing Morgan Pass between Kashmir and Kishtwar. The two illustrations at bottom of page show the outfit making camp near a Kishtwar village. Notice the hay hung in the trees for winter use.

Wardwan Valley is lovely. The mountains are not as steep nor as high as in Baltistan, but the timbered slopes lend a beauty to the scene that more than compensates for the lack of ruggedness. In Wardwan are to be found stag, red bear and black bear. A small river flows down the valley, tumbling over big boulders and in places seeming to loose itself in dark canyons. Two marches below Wardwan village the valley broadens out for some five miles, narrowing again as it becomes part of Kishtwar proper.

It was just above this wider part that we made a camp, pleasantly situated in a grove of poplars on the river's edge. Local report had told us that there were stag and black bear in the forests on the mountain, and a bit of careful reconnaisance corroborated the information. But for several days we were unlucky, not seeing any game. Then a local man that had been sent out with a spare pair of glasses brought word of a lone stag, seen the evening before in the timber just above camp. To the local shikari, every head is a big one, but while we did not place too much faith in his report, we started at four the next morning.

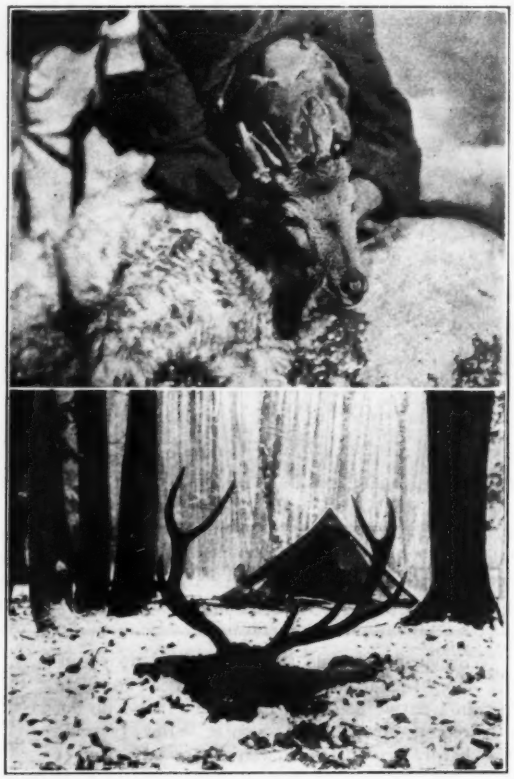
The going, which was steeply upward through heavy timber, was not difficult, though warming. As it became lighter we stopped frequently to look and listen. There was no breeze and the only sounds were our own heavy breathing. All of us were wearing native grass shoes, which are very light and practically noiseless. Finally, through the dim light, I made out the vague shape of a stag, standing at the forest's edge across a little *maidan*, or grassy meadow, some five hundred yards above us. He was facing toward us, his head outlined against a bit of sky. We were comfortably covered by the trees, so could examine him at our leisure. The head, while it did not look to be ex-

ceptionally large, seemed very symetrical. I could make out ten points, which is the average number, though twelve and even fourteen are not uncommon. I had been told, however, that the larger heads were more likely to have fewer points. At any rate, he looked fully worth a stalk, so we carefully moved upward, making a detour around the maidan. For sometimes the stag remained where we had first seen him, but before we arrived at anywhere within range he quietly walked into the timber. We crossed over to his side and carefully worked through the heavy growth, but it was hopeless, as all chances were against us. Rahim Joo, my shikari, advised lying up until evening in a position that would command as good a view as possible, as he said the stag would undoubtedly remain in the timber until late in the day, coming out to feed near sundown. We made ourselves as comfortable as possible and prepared to take it easy.

The native name for the Kashmir stag (*cervus cashmirianus*) is "hungal," though I more often heard it referred to as "barasinghe." According to authorities on the subject, however, the latter name is not properly applied to this animal, which is but distantly related to the true "barasinghe," or swamp deer, of India, (*cervus duvauceli*). In color the Kashmir stag is dark gray, tinged with brown. I have read that the color is dark brown, though the specimens I examined, while having much brown, were distinctly gray on the head, neck and upper part of body. The chest and belly are brown, as are the forelegs, while dark brown streaks run along the centers of the belly and back. There is a narrow white caudal disk, and the lips, chin and ears are whitish. Full grown stags average 48 to 50 inches at the shoulders; nose to tail about 86 inches. The tail is short, from four to six inches.

In summer and fall stags range at from 9,000 to about 12,000 feet, but in cold weather they descend to low altitudes and are said to be often seen feeding in the valleys. During the hunting season they are always found on timbered slopes, frequently grassy glades in the mornings and evenings. At a distance they resemble the North American elk, though they are smaller and less powerfully built. The call is very like the bugle of a bull elk. The rut begins in September and the fawns, which are spotted until the third or fourth year, are born in April.

After a long day of enforced inaction we took up the hunt again. Rahim Joo, who had been questioning the local guide, had an idea that our friend of the morning might come out onto a grassy point, some distance to our right and a bit below us. So we worked in that direction, keeping well up and within the timber's screen. The wind, which had blown all day, fell to almost nothing, what little remained being in our favor. For some distance we saw no signs of stag, though we covered that part of the mountain very thoroughly. Then, as it was becoming dark, we heard him bugle below us. A hurried descent to the edge of a little maidan and we saw him, about two hundred yards to our right and a bit below us. It was too far to risk a shot in that light, particularly as it seemed quite possible to get closer. We worked back up into the timber and through it to just above where he had been seen. In the meantime he had moved, so it was not until he bugled again that we located him at a point further down. I slid down a low bank, and by keeping behind some scattered trees, was able to approach to within about fifty yards. He made a beautiful sight, as he stood on a jutting point, looking off into the sunset. While I watched, he threw back his head and bugled again, then seemed to be listening for an answer. Frankly, I felt like a murderer. At my shot he jumped and dashed downhill. I had heard the thud of the bullet, so knew he was hit, and at such short range felt certain the shot must have struck very close to where I had held. Nevertheless, it was a relief to see him fall, after a run of about forty yards. The bullet had entered just back of the left shoulder and had broken up quickly, a piece coming out through the skin on the opposite side. An examination showed that in its passage, the bullet had taken a small bit out of both the heart and one lung. The head was very handsome, though not exceptionally large, measuring 39 inches along the beam and having ten points.



Upper: Goral
Lower: Kashmir Stag

A two day snow storm held us in camp, but on the third we discovered the trail of a black bear. It led up through fresh snow along the side of a small nullah, where for some distance he seemed to have been just nosing about, as though not intent on getting any place in particular. Then the trail began to climb and we pushed on as rapidly as the heavy going would allow. Rahim Joo suddenly stopped and pointed ahead. In a small spruce just above us was the bear. Now, I do not like to start trouble with any bear that is just above me, but in this case the slope of the hill was not directly toward us, so I let him have one. He dropped out of the tree and ran down through some bushes to the snowy bottom of the nullah, wallowing through to the opposite side and a little way up before I could get another shot. That dropped him and he rolled back. My first shot had creased in under the neck, the second had entered the right side and mushed his internals badly, though it did not come through. He was not a large bear, measuring a little over five feet, but the season was becoming pretty far advanced and our chances for bear were becoming correspondingly poor, so I was thankful for even a small one.

The Himalayan black bear, (*ursus torquatus* or *ursus tibetanus*) ranges throughout the forests on the eastern slopes of the Himalaya, from Persia to Assam. They do not grow to great size, the largest record that I have seen being 6 feet 7 inches from tip to tip. The hair is moderate in length and very coarse. The color is deep black, but one of the most noticeable things about the animal is the white crescent on its chest. There is also a white spot under the chin, though I understand that this is absent in some individual specimens. The claws are short, strong and curved. The black bear's food is said to be mainly fruits, roots and honey, though they also kill sheep and goats and will sometimes eat carrion. They are feared very much by the natives and I was shown scars by one or two that were said to have been caused by maulings. My shikari said he had been badly bitten by one that his sahib had wounded. At any rate, they seem to have a local reputation for savageness.

The country frequented by tahr and goral is usally very step. While they do not always inhabit the same range, in the part of Kishtwar that I visited, they were seen on the same mountain sides, though not actually feeding together. These two goats prefer timbered slopes, the steeper and more broken the better. Both of them are wonderfully good climbers. Their hunting entails considerable hard work, though, as they do not go above timber-line, the altitude is not excessive. Contrary to the case in hunting most varieties of mountain game, it is seldom possible to locate either tahr or goral from a distance. Once in awhile we saw them at a distance, but it was only because an intervening nullah happened to give us a view of their hill-side.

Stalking them requires a combination of mountain climbing and forest hunting, for sloping rocks, that are carpeted with a thin layer of pine needles, do not give a particularly firm footing, even though one's boot-nails are new and sharp. And the hearing of the tahr and goral is quite as acute as their senses of smell and sight. My kills of each of these animals were at fairly long ranges, estimated at about 250 yards, although the nature of the ground prevented me from checking the distance.

In the case of my goral, he was seen across a deep but rather narrow nullah, that had a rapid stream flowing at the bottom. There were several in the lot but by the aid of the glasses we were able to make out one that looked better than the others. I fired at this animal, wounded him in the shoulder. He ran downhill into a small grove of trees with heavy underbrush. We tried to cross the stream, but though it was not wide, several attempts resulted in nothing more satisfactory than a thorough wetting. There seemed to be no other way but to search for a better crossing, which was eventually found some distance up-stream. This, however, necessitated a long and hard climb over a shoulder of the mountain, so that when we reached the place where the goral had last been seen, we were not sanguine that he would still be there. But he was found without much difficulty and was put out at short range. The head was not large, measuring a trifle over five inches. The record head for Kashmir is a little over eight inches, but this was killed some years ago.

The goral has a wide range, being found in the lower Himalaya from Kashmir to Bhutan. Whether it is native to all mountainous regions further east, I do not know, but I was told by hunters in China that it is found in parts of that country. It is not a large animal, measuring only 27 to 28 inches at the shoulder and about four feet from snout to tail. The color is light brown, tinged with black, the forelegs being much darker and having black streaks down their fronts. The chin and throat are white. In shape the goral's horns are similar to those of our Rocky Mountain goat, and have the same slightly wrinkled surface near the base, though they are lighter in color. The scientific name for this animal is *cemas goral* or *nemorhoedus goral*. I understand that the Kashmir name is *pij* or *rai*, though all the Kashmiris in my outfit called it *goral*, which is said to be its name in the country further west.

As I have mentioned before, tahr hunting is very similar to goral hunting. The country is almost exactly the same, though I found that tahr seem to prefer even rougher and steeper hill-sides. Both, however, stay below timber-line and keep close to what cover there may be on the slopes. I sometimes saw tahr in the open, but when they were, it was apparently because no trees could possibly grow on the steep slopes they were traversing. They bounded down inclines that from where we were seemed almost vertical. Like the markhor, their long shaggy coats give them an appearance of heaviness that their actions at once dispel.

We had tried several times to get close enough for a shot at tahr, each time finding the range so long that the chances of only wounding the animal were too great to be risked. We felt, therefore, very lucky, when one day there were discovered, across a narrow but steep sided nullah, at less than three hundred yards. They did not appear to have seen us, so I had time for a comfortable shot. The billy was standing under a large deodar, partly in shade, where he made a clear though small mark. At my shot he ran into the bushes and I felt certain I had scored a miss. We hurried along to where a better view of the whole hill face could be had, hoping to see him come out. The shikari called to me and I ran to where he was scanning the opposite hill through his glasses. At first I could see nothing unusual, though Rahim Joo's smile seemed to indicate that there was something to be seen. Then he pointed to a ledge at about our level, which was fully two hundred feet below where the tahr had last been seen. There was the animal, lying on its side, with crows already beginning to gather. He had been hit through the body, had run among the trees and must have slid and fallen to where we found him, being all the while screened from our view by brush and jutting rocks. It was a long job to salvage him, as there was a deep and very swift stream at the bottom of the nullah, which the Kashmiris absolutely refused to cross. Finally two of them volunteered to go up stream to where there was one of the timber cantelever bridges common to the country. These bridges are built by the P. W. D. (as the Public Works Department is known) and are often a great boon in that land where all forests are owned by the Maharaja and no trees may be felled. But it was the next day before the tahr was brought into camp. Unfortunately, the men had skinned it out, to avoid having extra weight to carry, so I was unable to take accurate measurements. Those I give, therefore, with the exception of horn lengths, are taken from other sources.

Upper: Himalayan Black Bear
Lower: Serow

Tahr, or tehr, is the Western Himalayan name for *capra jharal* though in Kashmir he is sometimes *kras* by the natives. He ranges throughout the forested southern slopes of the Himalayan from Kashmir to Sikkhim, though is not plentiful in all localities. The hair, which is rather short on the head, is much longer on the body, old billies having a heavy shaggy mane, reaching almost to the knees. On top the coloring is a deep, almost chocolate, brown, which shades off to a lighter brown below. Billies are darker than nannies, particularly in their faces, which helps to distinguish between the sexes. The horns, which start close together at the head, continue on a line with the face for several inches, then curve sharply backwards, becoming thinner and slightly diverging. They are distinctive. The largest, of which I have seen a record, are given as 16½ inches. Anything over fourteen inches is exceptional now, so I was very pleased to find that my specimen measured just 14½ inches.

The serow, or Himalayan goat antelope, who rejoices in the scientific name of *nemorhoedus bubalinus*, is found in the forested regions of the Himalaya from about 6,000 feet on up to near the timber line. I was told in Upper Burma that they were sometimes killed in the Kachin Hills, near the Chinese border, though they are said to be rare in that region. They are to be found in the hills around the Vale of Kashmir and in Kishtwar, though in no place are they common. Only one serow is allowed on a Kashmir shooting license. I have seen a description of the serow that is rather apt: "An extraordinary mixture of antelope, goat, sheep and donkey." The animal has a large head and ears and a heavy body. The, hair, which is long and coarse, is black and brown on the back, and reddish brown on the legs and underbody. There is a stiff mane of dark hair and a short beard. The average height at shoulder is given as 38 inches, though my specimen measured 40 inches. The horns are very like those of the white goat of the Rockies, which is said to be closely related to the serow. Good horns are from nine to (*Concluded on page 16*)

Pistol Training

By Capt. H. V. Dexter

THE pistol occupies a relatively low place among the various arts and sciences that go to make up the military profession. This is wholly reasonable. In the Infantry, those armed with the pistol still have much of their interest and training centered in the rifle, machine gun, or howitzer. Such time as may be properly alloted to marksmanship instruction must go largely to these more important weapons. The place that the pistol occupies in warfare does not entitle it to much, but we should give it the best we can.

Some very remarkable pistol qualification percentages have been reported of late. However, in the service in general, the pistol will never attain the excellence of the rifle for two reasons: first, the time devoted to its instruction will be limited, due to its secondary nature; and second, the personal factor is so much greater. The second could be greatly reduced by correcting the first, but it is difficult to see how, with due regard to the amount of other necessary military instruction, the pistol can ever be given more than a week a year, if that much.

Our present system for pistol training is a faithful reproduction of the rifle system. The rifle system has proven its value. However, it seems to leave something more to be desired on the pistol range. Since the modern system of instruction consists mainly of so presenting a subject that the beginner cannot go wrong at the start, we will look for these difficulties and try to remove them.

The big difference between the rifle and the pistol is in the ability to hold. With the rifle we have the sling, both elbows on the ground, the shoulder, and for the first stages of instruction the sand bag. After a few hours' position drill the average soldier can get his sights where he wants them and hold them there for a reasonable length of time, and without undue effort. He can then concentrate on his trigger squeeze without worry concerning his laying. His piece is steady and clamped in position, and any body trembling is lost in the vice-like tension of the sling.

The pistol man has only one point of support, and that at some distance from his body. Every tremor of his arm, every breath of wind, every heart throb seems to be conveyed to the piece and magnified in the sights. Few men can hold a pistol steady on the bull's-eye at fifteen yards. Even after more training than the average man will get he cannot hold consistently at twenty-five—and who can hold at fifty? On the range with a loaded rifle the best of us develop a trembling that fills the heart with rage and hopelessness. It is always worst when going up for record. Who has not eperienced it? Call it nervousness, buck fever, anxiety, or desire, the naming of it will not remove it. The experts then come over and say: "This has no effect on the shot. Hold as best you can, and then squeeze them in. They will be good." Very true. We have proved it. It does not affect the shot, but it does affect the shooter.

The recruit comes out for his first instruction. He is given a thorough course in sighting and aiming. For this we have elaborate equipment: sighting bars, rests, triangle apparatus, etc. The instruction is good because it is standardized and easy to give. The most minute errors in sighting are sought, found, emphasized, and corrected. It is the first instruction, often the best instruction, and so takes a deeper root in the mind of the beginner. He is taught that there are only two kinds of sights: a correct sight and an incorrect sight. That a correct sight must be just so, and if not it is incorrect. He is taught that he cannot hope to hit the bull, to make good scores, unless he can take a correct aim. He sees this, understands, and is convinced.

He is then instructed in the proper positions, the trigger squeeze, and the rapid fire exercises. The theory of all these is explained to him, and the trigger squeeze is particularly emphasized. He is now ready for the range.

The first thing he learns upon arriving at the firing point is that he cannot keep his sights on the bull at all. It is hopping around like a drop of water on a hot stove. Now he's on: now he's off. The harder he tries the worse it is. He comes down and tries it again —same or worse. The sights are on and before he can start his squeeze they are off again. About this time the sergeant comes up. "Get it on—then squeeze," he says. Recruit tries again, honestly and conscientiously. Finally he calls the sergeant and explains his trouble. Sergeant says: "Oh, that's all right. Hold as close as you can and then squeeze it anyway. It'll be a good shot." The lieutenant comes along and confirms the sergeant. He is very encouraging. It is not necessary at all it seems, that the aim be correct. Just hold it as near as possible, then squeeze.

Now Mr. Recruit has been following the instruction very carefully. He is deeply interested. He has always wanted to be a good pistol shot. As a kid he played Buffalo Bill and dead Eye Dick. And he wants a badge to wear on his chest to show Sally when he goes home. He has understood the instructions so far. The bullet went where the sights pointed. The sights must point at the bull if you want to hit the bull. But he can't hold the sights on the bull. He can get them on for an instant, but before he can squeeze they are off again. Now they say that the shot will be good even if the sights are not on the bull; that a correct aim is not necessary. Well then, why all that talk yesterday about correct and incorrect sights? Why so much pains with the triangles that never were good enough to suit them? *Exit* a certain amount of respect for the lieutenant, the sergeant, and the instruction in general. Also that belief that lies in each of us that we are born shots and need only an opportunity to show it, is dying, and with it dies enthusiasm and self-confidence.

Let us follow his thoughts: "The bullet goes where the sights point. If I squeeze it the chances are five to one it will be a four or a three, because most of the time it seems to be pointing at the outside edges of the target. I guess the sergeant and the lieutenant do not know how badly my hand trembles, but I am a lot worse than the others. Maybe the others only tremble out as far as the eight or seven ring. I have good nerves. I won't flinch. The next time the sights are on the bull I'll fire before they get off again." He does. The hard part is that it will probably be a fair shot. After that when he gets good shots they only confirm his "dope," and the poor shots convince him that he didn't pull quite quick enough. His score is rotten.

Leaving the firing line he soon finds out that Smith and Jones and Brown and Black have scores as bad as his, and soon he is loudly proclaiming, (to hide his disappointment): "I can't shoot this thing. I smoke too many cigarettes."

And the company qualification percentage is low. There are some letters to write.

Our marksmanship system of instruction is good. It is producing better shots and more good shots than ever before. It has proved its value with the rifle. But there appear to be some hazards on the pistol range that are not evident on the rifle range. These hazards are mostly mental, but nevertheless they are true obstacles to high qualification. They are founded on the fact that the bull of the pistol target is too small for the average man to hold on consistently. The trouble, of course, is not so much the size of the bull as the difficulty in holding. But why teach a man that the sights must be just so, when we know that he cannot possibly hold them so? Why encourage him in training to aim at a bull, encourage him to want to hit the bull, and then on the range tell him to shoot whether it is on the bull or not? These inconsistencies of theory and fact do much to lower the prestige of the instruction.

Trigger squeeze is the secret of pistol shooting. There are two enemies to the trigger squeeze: the flinch, caused by conscious or unconscious reaction against the noise and shock of discharge; and the jerk, caused by a desire to get the shot off while the sights are properly aligned and before they wabble off. A correct trigger squeeze corrects for both of these. This can be understood by most men. The flinch is common to both the rifle and pistol, and it is a matter of opinion as to which it effects the most. The rifle kicks painfully at times and the pistol does not, but there is something about the discharge of the pistol that encourages the (*Concluded on page 15*)

The University of Chicago Rifle Club

By C. G. Harrel

THE accounts of various rifle clubs, as they have appeared in THE AMERICAN RIFLEMAN, have been so interesting that I have been prompted to give an account of the University of Chicago Rifle Club, hoping that its experiences may interest and, possibly, help other clubs. A university club is not a stable organization, like a civilian club, for its membership changes rapidly, and the time of those who can shoot is occupied largely in teaching beginners; while a civilian club has a comparatively stable membership, with so few beginners that instruction does not interfere with the practice of enthusiasts in the game. For the past three years I have been a member of The University of Chicago Rifle Club and, for the past two years, have been its rangemaster and coach. With this personal contact and with the help of Dr. W. J. G. Land, who was responsible for the organization of the club, and Dr. Charles J. Chamberlain, who has been its secretary since 1919, I have prepared the following account.

The University of Chicago Rifle Club was organized in 1916, with Dr. Land as Captain, W. F. Loehwing as President and Dr. A. C. Noe as Secretary. Loehwing soon went to France, where he reached the rank of Major. At Chateau Thierry he was severely gassed and has not yet entirely recovered. At intervals, while not in some hospital, he has returned to the University and has now received the degree of Ph. D. in botany. His research has dealt with chemical aspects of plant physiology. At present, Major Loehwing is with Chemical Defense section of the United States Army.

During the war and for some time afterward, Dr. Land had almost the entire responsibility for the work of the club, both on the indoor range and on the ranges at Ft. Sheridan, the Great Lakes Station and at Camp Logan. During the war the indoor range accomodated about 300 men a day. Dr. Land trained the coaches and saw to it that coaches were always on hand: he himself often coached 5 or 6 hours a day, in addition to his university teaching. Being expert with tools, he also kept the rifles in repair. In 1916 he invented and constructed a telescopic sight base for the 1903 Springfield, which can be attached in a few seconds. After a successful indoor test in the autumn of 1916 and at Fort Sheridan in the spring of 1917, Dr. Land drew up patent specifications together with a finished sight base, and presented them, without any charge, to the United States Government. This mount is known, commercially, as the Noble Mount; but the U. S. Government has the rights of a patentee.

From the first, Dr. Harry Pratt Judson, President of the University, was an active member and, since his retirement, has maintained an interest in the club. He provided funds for three ranges in succession, as the club expanded,—the first range, with two targets; the second with five; and the present range, with ten. President Judson not only provided funds, but appeared at the range, where he was known as a good pistol shot.

Dr. Charles J. Chamberlain has been secretary of the club since 1919 and, from 1917 to 1923, was one of its regular coaches. He is proud of his Springfield rifle, which he loaned freely to members who had qualified as marksmen. When any one qualified as sharpshooter or expert, he carved the name on the stock. At present, the stock is covered with the names of 20 experts and 20 sharpshooters.

Commander W. A. Lee, of the U. S. Navy, in the early days, helped us greatly with the coaching. He used to demonstrate steadiness of hold by drawing his bead, and then allowing us to hold a board in front of his eyes for 10 seconds before he pulled the trigger. With the old sub-caliber Springfield, he sometimes scored 5 shot possibles on a one inch bull at 50 feet, under this "blind-fold" condition; and he seldom got more than one of the five shots outside the bull.

Professor R. R. Bensley, head of our Department of Anatomy, has long been the Treasurer of the club. He is an expert rifleman and his enthusiasm has added many a young medical student to our roll of experts. With one man like Professor Bensley on the staff of each department in a university, a rifle club would succeed in spite of adverse conditions.

Dr. A. C. Noe, the first secretary and now assistant secretary, also coached in the early days and attended to the business of the club, in addition to rather strenuous duties in the R. O. T. C.

We are proud to have on our roster, Mr. Russell Wiles, Sr., often member of the Dewar Team in .22 cal. shooting. He gave the club a great stimulus by instructing us in the finer points of the game and, this year, he really saved the club by agreeing to finance its deficit. His son, Russell Wiles, Jr., who broke the world's record in .22 cal. shooting at Camp Perry in 1923, is also a valuable member of our club.

Among other members of our club, let me mention Capt. R. V. Merrill, Capt. Roy L. Munger, Lieut. Howard Wakefield, Ensign Paul J. Sedgwick, Ensign Porter Purleigh, Robert Bensley, Gilbert Moss, Theodore Grauer, D. B. MacCallum and Russell Mooney, all expert riflemen; and J. B. Rhine, who won the Presidents Match in 1919 and who preceded me as rangemaster and coach.

With such men and the stimulus of the War, the membership was large and enthusiastic; but, since the war, something has happened. Scores are gradually improving, but membership is decreasing at a deplorable rate. Let us look at the scores and then try to find the reason for decreasing membership.

From March 6 to May 8, 1919, for ten consecutive weeks, matches were shot in the prone position, ten men shooting 20 shots each, about half the men using telescopic sights, the five highest to count for record. The scores of the five highest were as follows:

1st week	945	7th week	977
2nd week	964	8th week	978
3rd week	976	9th week	975
4th week	957	10th week	980
5th week	966		
6th week	965	Total	9683

Average ..... 96.8 per cent
Possible for all of the above matches 1000 points

In the school year of 1920-1921, shooting under the same conditions with the same equipment, the following matches were shot, beginning February 13 and lasting until April 17, 1921. The scores of the highest five were as follows:

1st week	964	7th week	983
2nd week	961	8th week	983
3rd week	960	9th week	995
4th week	969	10th week	991
5th week	984		
6th week	980	Total	9770

Average ..... 97.7 per cent
Possible for all of the above matches 1000 points

In the year of 1921-1922, ten prone matches were shot with telescopic sights, ten men shooting ten shots each, the five high counting for record. The matches were not at regular intervals, but nevertheless they gave us a good average for the year:

Match No. 1	498	Match No. 7	479
Match No. 2	496	Match No. 8	497
Match No. 3	499	Match No. 9	498
Match No. 4	500	Match No. 10	497
Match No. 5	497		
Match No. 6	464	Total	4925

Average ..... 98.5 per cent
Possible for all of the above matches 500 points

The team was constantly changing, so that a good many shot in these matches. J. B. Rhine shot in all of the matches.

Up to this time, all coaching had been done by volunteers, one man having charge one night and another the next night; but, with the year 1922-1923, this method was changed and J. B. Rhine was appointed rangemaster and coach, with entire responsibility for the conduct of the range. With the older members dropping out, it was necessary to develop men, most of whom had never shot before. Consequently, only one match was shot in this year. The score of this match, which was shot under the same conditions, but with iron sights, was 489.

In the year 1923-1924, it was my pleasure to have charge of the work. During this year, we were still trying to develop a team out of raw material. Three intercollegiate matches were shot under the same conditions, but with iron sights. The scores were as follows:

Match No. 1	500 x 500
Match No. 2	497 x 500
Match No. 3	499 x 500
Total	1496
Average	99.7 per cent

For the present year, 1924-25, we have had more matches, under the same conditions and with iron sights. The scores were as follows:

Opponents	Score	U of C Score
Carnegie Institute of Technology	489	499
Columbia University	498	499
Nashville Rifle Club	488*	495*
Girls Municipal Rifle Club of Minneapolis	491	496*
Nashville Rifle Club	484	500
University of Maryland Rifle Club	495*	500*
Colgate University	494	500
Wooster Polytechnic	488	500
Total	3927	3989
Average, opponents per match	490.8	
	98.16 per cent	
Average, U. of C. per match		498.0
		99.72 per cent

* Ladies team.

In addition to the above figures a brief summary of the individual members' activities this year is as follows:

Small bore medals won	8
Small bore state medals won	4
Small bore medals won at national matches	9
30 caliber medals won in Illinois State competitions	7
30 caliber medals won in national matches	4
Pistol medals won	6

This is more medals than has ever been won by the club in any previous year or any 2 years of its existence.

When one glances over these statistics, it is easily seen that there has been a steady improvement during the past five years. Some of the improvement has been due to guns and ammunition, but some of it represents real improvement in shooting. The quality of the shooting has improved, but the number shooting has decreased.

When I took charge of the range, I was informed that it had always been the custom of the club to shoot its matches in the prone position, since they believed that the prone position is the only one in which telegraphic matches can be conducted with any degree of uniformity. In the other three positions, as at present described and used, there is so much opportunity for freak devices (palm rests, peculiar uses of the sling, etc.), that the standing position, as taught at Camp Perry, would lose any match, if the opponent used a palm rest, placed the left hand near the trigger guard, rested the left arm against the side, or used any one of several devices which improve scores but are perfectly worthless in practical shooting.

Soon after I took charge of the range, my good friend, W. M. Garlington, came over and began to assist me with the coaching. He could not see why we were shooting all our matches in the prone position and, at a meeting of the Illinois State Rifle Association, he made a speech to the effect that colleges and universities should stand up on their feet and shoot like men. So, I took my friend's advice as I also wanted our teams to shoot the other positions and, this year, scheduled two matches in all four positions. They were not shot and, consequently, were lost by default, because we could not develop a team which could stay on the target in all positions. It is certainly not because we do not know all the positions; for in 1923-24, in the Annual Gallery Rifle and Pistol Competitions of the N. R. A., members of our club won first place not only in the prone match at 75 feet (Match No. 10), but also the sitting and kneeling matches (Matches No. 6 and No. 8), and the Individual N.R.A. 75-foot Gallery Championship.

If some other school can shoot in all positions, why cannot we? Let us analyse the situation.

The class records of the Recorder's Office show that the men do not spend all their time studying. A look at the athletic activities of our school is more suggestive. We find that men are given physical culture credit for handball, basket ball, football, track, tennis, swimming and various things. They not only get the required credit, but those who excel are publicly presented with the *C*. Besides, their pictures and records are published and made a permanent part of the history of the University.

Further, there is interfraternity baseball, interfraternity basketball, interfraternity handball, anl interfraternity this and that, for which the University gives cups to the winners. But no physical culture credit is given for rifle shooting, even in our Military Department; and no recognition is given, in cups or the *C*, even to those who have won in national competitions. This means that undergraduates who take up rifle shooting must find time in addition to the time required for physical culture credit, and must undertake the game, knowing that the University will grant no recognition. The undergraduates who do come out, under these conditions, can spare but little time, usually half an hour or an hour a week. In so short a time, it is folly to try to teach them more than one position; and I believe everyone will agree that the prone position should be taught first.

Other Universities, like Yale, Harvard, Princeton, Columbia, Pennsylvania, Syracuse and others, grant the letter and give other encouragement which brings out a large number of men and enables them to devote sufficient time to shooting to develop creditable scores in all positions.

Recall your college days, if you had them; or, if not, look at this daily schedule of the average student and see what he is doing with his time.

Sleep*	8 hours
Recitation and Laboratory	6 "
Meals	1½ "
Physical Recreation	½ "
Preparation for class work	6 "
Social Activities, meetings, shows, etc.	1½ "
Free Time	½ "

* This may be too high for week days, but is usually made up Sunday morning.

It is evident that, unless physical culture credit is given, there is not much free time. If you have been in college with three or four classes a day, you may have thought that each professor was laying out work enough to take all your time, as if he thought his work was the most important. I spent six years as an instructor and, I must confess that I had some such notion about the importance of my subject. So I can't blame the professors so much, if their assignments seem too heavy.

The solution is to give physical culture credit and to give the letter. We agree that the granting of the letter should be guarded, and we would suggest that the recipient of the letter must have made the grade of expert rifleman, both indoors and on the regular course of the army and navy; and that he must also have won a place in the medal class in some N. R. A. competition or in the matches at Camp Perry.

It is reported that a Big Ten Conference will start next year. This would be a great stimulus to rifle shooting; but to be fair and efficient, there should be uniformity. All the schools in the conference should give physical culture credit and the letter, so that the students will have time for practice and incentive to excel. If matches are to be shot in all positions, the N. R. A. should send photographs and much fuller descriptions of the positions than in the previous N. R. A. Gallery Match Bulletins. It would also be a fine thing if a representative of the N. R. A. would visit all the institutions and explain and demonstrate the positions so as to secure that uniformity which is absolutely essential if scores are to mean anything in telegraphic matches.

Almost from the beginning, there has been a ladies' section of our club. Starting with only a few members, this section has grown steadily and was never stronger than today. We believe that our ladies' section, including both graduate and undergraduate students, can shoot a prone match with any men's team in the country, and stand a good chance of winning. The women get no more recognition than the men, but they have no sororities to dissipate their time and they are not allowed to schedule any intercollegiate athletics. Since our university does not recognize rifle shooting as a sport, we can schedule matches between our women and those of other schools. Our women have never lost a match. Seven of them have won the expert rifleman decoration with the 1903 model at Fort Sheridan.

Summary

1. In many schools interest in rifle shooting has decreased since the war.

2. In clubs like ours, in which the student can spend very little time, the prone position is the only one which can be used with any degree of success.

3. If four positions are to be shot successfully in schools, time must be given for practice, and this practically involves giving physical culture credit for rifle shooting.

4. Rifle shooting should be made a sport, like other college sports and not be referred to as only a preparation for war.

5. The N. R. A. should furnish photographs and much more thorough descriptions of the four positions to secure uniformity.

6. If a Big Ten Conference should be organized, there should be an N. R. A. representative to secure uniformity in positions. There should also be uniformity in conditions of recognition of rifle shooting in the schools.

7. Physical culture credit and the granting of the letter would be an immense stimulus to rifle shooting.

A Hoffman-Martini Small Bore

By Russell Wiles

AT Camp Perry in 1923 I tried Walter Stokes' personally fitted small bore, and found it very comfortable, with a big flat cheek piece that made the stock as easy as a pillow. I then resolved that I would build one. Stokes gave me a most valuable hint when he told me he first made a stock in soft wood and, after spoiling a couple, got one right and copied it in walnut.

During the winter of 1923-24, having some time and good shop facilities at my disposal, I made a soft wood stock for my B. S. A.

The photograph shows both scope and iron sights in place. The front iron sight is taken off when the scope is used, and the rear sight is dropped out of the way. Note that scope and iron sights are in the same line so that the position is the same with either.

Dimensions—Barrel length, 25"; drop to comb, measured at center of stock, 1⅝"; drop to heel, 1⅞"; trigger to butt, 14½"; trigger to grip cap, 3½"; upper sling swivel to butt, 28½"; line of sight to center of bore, 1⅜"; heel to point of comb, 10¾". All drops are measured from line of sight.

What I set out to do was to make a stock that fitted me, in prone position only, and with the scope sight on. This is an unusual problem, for most stocks are compromises to be used in various positions by various people and with both iron and scope sights which differ in height a half an inch or more. I am long in the neck, thin in the face and broad in the shoulders and I suspected the thing would be a freak, but if it fitted me I wasn't worried about looks.

My first step was to get a block of redwood three inches thick, twelve inches wide and sixteen inches long. Through this block I bored a hole to fit the stock bolt, the hole being one inch from the right face and two from the left, leaving material for a fat cheek piece, and it was half way between the top and bottom of the block. Next I cut away a little wood at the front and formed the shoulder that enters the frame. By putting a long threaded rod into the threaded hole in the frame and through the hole in the block, with the aid of a nut on the rod I could drive the partly formed shoulder into the frame and make the frame form the shoulder just as dowel pins are formed by the plate through which they are driven.

After bolting on, I put the thing to my shoulder and found it far too long, and as I had never heard of a stock very much over fourteen inches long, I thought I wouldn't be unduly rash if I cut it off to sixteen inches from the trigger. At the same time I roughly cut from the left side of the rear of the block, behind the future cheek piece, about an inch of the extra thickness, so that the thing could be gotten into the hollow of the shoulder. I also roughly cut from the left side over the cheek piece enough wood that with the greatest pressure I could put on, and with my head as far down as possible, I could just see through the scope.

Next I cut from the bottom at the front enough that the operating lever of the B. S. A. could be closed, and drilled a small hole for the end of the lever to enter. This gave a good idea of the feel and brought me to the point of putting on shooting clothes and trying it prone with the sling. It at once appeared that the stock was too long and too high in the cheek piece.

I have a pair of shooting glasses with the optical center of the right lens as far up and to the left as I can see through without my eyebrows interfering with the clearness of my view, and I put this on and slowly cut the cheek piece until, with a comfortable cheek pressure, I could look through the scope and through the optical center of my shooting glasses. Also I gradually shortened the stock a little at a time until it seemed right.

All the cuts at the butt were at an angle to bring the heel far back of the toe, for a rifle in prone position often slips down and never slips up, and I wanted the butt plate to be at such an angle that slip was impossible. But the thing was far from looking like a stock, although it felt like one, for it was still twelve inches from top to bottom at the butt. Next I had a friend hold a Caliber 22 Springfield butt plate against my shoulder while I lay prone and slid that monstrous stock around on it until it was right. Then I marked the place, cut off a final quarter of an inch from the stock to compensate for the thickness of the butt place, and screwed on the butt plate.

After a final try to make sure all was right, I was able to make the chips fly, for the vital things were settled. Cheek piece, length, drop at heel, and lever fit were done, and all there was left was to cut off the extra wood. In about fifteen minutes the thing looked like a stock, not smooth nor yet orthodox in shape, but anybody looking at it would have recognized what it was. Then followed a lot of trimming down and smoothing off, and finally I was able to shoot the gun. It was simply perfect. I never knew the prone position could be so comfortable or that I could hold so hard. It was exactly what I set out to make, a gun to fit me, regardless of what it does for anybody else.

And, too, it fits folks of my general build. Grove Wotkyns fits it like the paper on the wall, and likes it. Crossman could fit it I know, and when I came to measure the thing from the scope line of sight, I found it but a shade off the dimensions that Crossman recommends in a recent article, but remember, it is measured from the scope sight line which is over half an inch from the usual iron sight line. Dimensions are as given in the table.

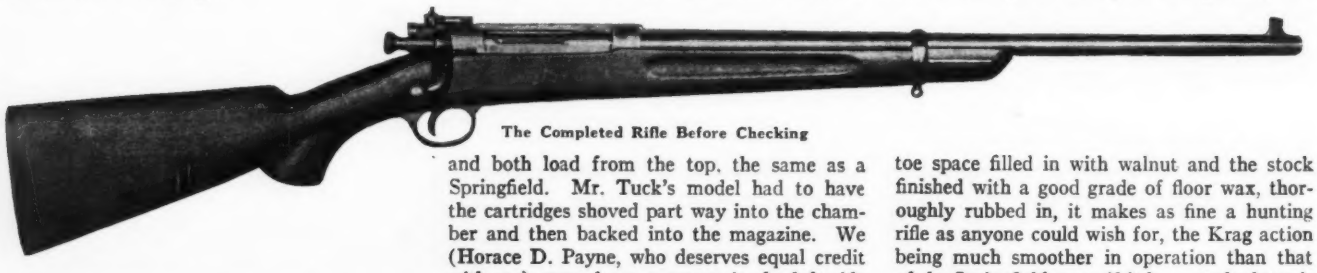
Since the drop to comb is just about the distance that the sight is above the bore, the top of the stock is in line with the bore, and so this kind of a stock can't be made for a bolt action rifle. But for any rifle with a falling or rolling block, this stock can't be equalled. Making it is simply a matter of starting with a big block of soft wood and trimming until it fits, regardless of looks or of the dimensions that somebody says are right. The one freak dimension that I ended with is stock length, 14¾ inches. But shot gun stocks on which the head is laid well forward are often nearly as long, and this fits me. Lying prone with my head and neck comfortable, my forehead nearly reaches to the rear sight.

When the stock was right for the scope, I had the iron sight problem on my hands, and that was solved by (*Concluded on page 17*)

Remodeling the Krag

By John C. Harris

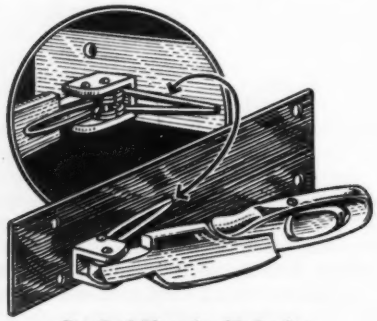
IN the January 15th, 1923 issue of *Arms and the Man* I found something that interested me considerably for the reason that I might be able to help the man who asked "Can the box be removed from the side of a Krag 1896 carbine, a plate put on and a flat spring put inside, so that the magazine will hold two cartridges?"



The Completed Rifle Before Checking

With due apology to Major Whelen, who answered the question saying it would be prohibitive in price and could not be loaded from the top, I will state that it can be done, in two ways; that it can be loaded from the top and hold three cartridges instead of two and that it doesn't require an expert toolmaker to do the job, either. (I happen to be an expert toolmaker of over thirty years experience, myself, but that is not my fault.)

I got my first idea from an article in that greatest of outdor magazines *Outdoor Life*, written by Fred W. Tuck, of California, who removed the projecting part of the magazine, covered the opening with a plate and used a V shaped spring which I tried and discarded. The next development was a spring and follower very much like that of a Springfield, the follower being made from a piece of small angle iron. My first spring was made from a clock spring, but I found that a Springfield magazine spring, ground down and narrowed to go in the follower space in the magazine, gave better satisfaction. One end was fastened to the plate and the other to the follower by two 2/56 screws. The plate that covered the



Detail of Magazine Mechanism

magazine is 1/32 half hard or hard flat stock.

The next improvement was to use the regular follower with the ear part cut off where it would square up. A stud was made and slotted for the squared end of the follower to fit in and was held by a pin through the stud and follower, a second pin below holding a coil spring of music wire, which is used to push the follower over. (The stud is fastened to the plate by a screw or riveted.)

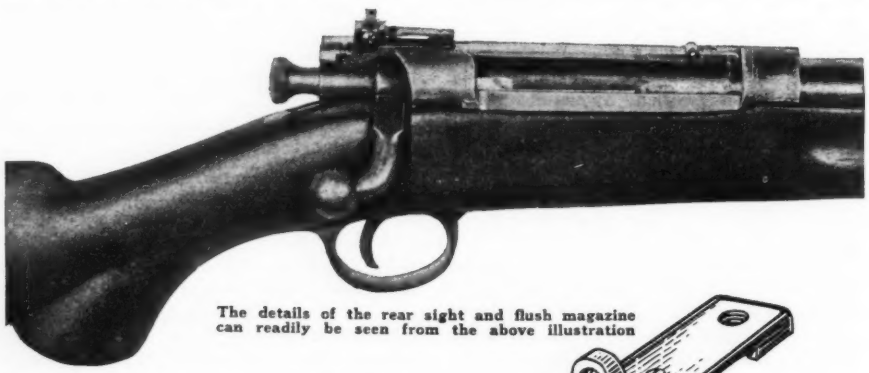
I found the last system worked the best and both load from the top, the same as a Springfield. Mr. Tuck's model had to have the cartridges shoved part way into the chamber and then backed into the magazine. We (Horace D. Payne, who deserves equal credit with me) ground out a groove in the left side plate which makes it easy to load. The bolt handle is bent at right angles to the sear, which does away with another projection and speeds up the action one-third.

For about two and one-half inches in front of the receiver, a Krag barrel is turned perfectly straight. I have bored and turned a sleeve which continues the taper of the barrel ending with a fillet where the square shoulder of the receiver comes. The sleeve is heated to a dull red and slipped over the barrel to the receiver, where it is securely shrunk fast when cold. Two or three thousandths is enough for shrinkage. This makes a better looking job than the square shoulder. I have wondered why the gunmakers who are remodeling the Springfield into a sporter do not do the same thing. It is not necessary to use a high grade steel, in fact, machinery, or cold rolled, which are easier to work, fill the bill entirely.

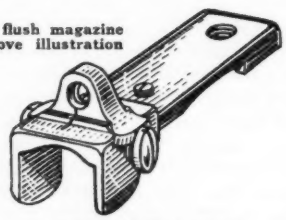
These two models were given very thorough try-outs in the Adirondacks, during the past two seasons. The only difference was that the one with the remodeled Krag follower was much easier to load.

I covered the plate on the right side of the magazine with a thin strip of walnut, dovetailed in at each end, which makes it a fine, smooth job and makes it easy to carry, which it was not with the clumsy magazine projection, as many of the boys who have carried and used them can testify. With a pistol grip pegged onto the original stock (after it has been thinned down so as to lose its club shape) and checked, the butt plate straightened, the toe space filled in with walnut and the stock finished with a good grade of floor wax, thoroughly rubbed in, it makes as fine a hunting rifle as anyone could wish for, the Krag action being much smoother in operation than that of the Springfield, even if it has not the latter's strength, on account of less locking lugs.

For a rear sight I made a peep which is fastened to the bolt by a screw in a hole tapped into the extractor pin. It has elevation and windage. The wings on the side of the sight do away with all sideplay and make it very strong for use in the woods. The main thing is that it is all so compact and smooth that there is nothing to catch in the brush, which I have found is not true of the Lyman or Marble lines, particularly the Lyman 48 which is O. K. for target or open shooting, which we do not have around here.



The details of the rear sight and flush magazine can readily be seen from the above illustration



Detail of Rear Sight

I am indebted to Harvey E. Miller of this city (Binghampton, N. Y.) for the pen and ink sketches of sight and follower. Besides being a mighty good sportsman as well as an artist, Mr. Miller has the most complete North American Big Game head collection in America. Many of them are record heads and he has done all the mounting, himself.

Bullets and Bombs

By Major G. P. Wilhelm

THIS is a story for riflemen about bombs and battleships. The author is particularly well qualified to write on this subject inasmuch as he is neither an aviator nor a sailor. It may at first seem a far cry from the question of the obsoletion of the rifle to the question of which is superior, the battleship or the bomb. If, however, the battleship is to be done away with by the plane and the bomb and war is taken from the ground and water to the air, the day of the rifle has vanished.

In the present controversy between aircraft and battleships fliers have become sailors and bombers have become fliers, but this is the first instance that an Ordnance small arms specialist has posed as a flier, sailor, and bomber at the same time. This article is written for riflemen however and not for aces and bombers.

The Ordnance Department can be considered as entirely neutral in this discussion in as much as they furnish the bombs for the bomber and the anti-aircraft guns and ammunition for the anti-aircraft batteries. Therefore, from an Ordnance viewpoint it is immaterial which side becomes of paramount importance.

The fact that the Ordnance Department is charged with the design, manufacture, procurement, supply and the determination of bomb ballistics must be a great surprise for the casual reader. From the press reports it might be thought that the bombs were designed by no less a personage than General Mitchell himself.

Prophets are never without honor save in their own country, but this is not true of air prophets. Air prophets seem to have all the honor in their own country in the present verbal battle between the battleship and the anti-aircraft guns on one side and the plane and the bomb on the other. Usually prophets are a pessimistic bunch and the lay mind wonders whether they should ever have any honor. This question of prophecy takes us back to the celebrated incident of the Wooden Horse of Troy. Laocoon, the High Priest of Troy, warned the Trojans against "Greeks bearing gifts," when the Greeks left a large wooden horse at the front gates of Troy as they apparently abandoned the seige and set sail for Greece. Laocoon, who had apparently suffered for years in Greek restaurants, said "Beware the horse, these Greeks are a foxy bunch. Whoever heard of them giving anything away for nothing." The dire words of Laocoon were disregarded and the Trojans tore down a portion of their city walls to bring in the horse, which was too large for the gates. That night the flower of the Greek army dismounted from the inside of the horse and Troy is now the name of a city in New York. Laocoon as a reward for his warning, together with his sons, was made away with by a sea serpent and to this day our idea of torment and torture is represented by the sufferings of Laocoon in the grasp of the serpent. This was before the day of the bootlegger, which makes it all the more remarkable.

With this warning in mind, I do not intend to do any prophesying.

Now, according to the air prophets, who to say the least are optimistic, there has not been produced such an easy way to sink ships and destroy fortifications as the plane and bomb since the Jews shook down Jerico by marching around the city seven times and giving a loud cheer. The battleship of course has been "annihilated" before. In fact, we are told that several generations ago the French and British navies were on a par or very nearly so. The torpedo came along and the French saw in this an "annihilator" so they quit building battleships and built torpedo boats and torpedos. At the end of their building program they had few battleships, lots of torpedo boats and torpedos. In the meantime the British had continued building battleships and when the French woke up Britannia ruled the waves.

As we go back in history, we find striking examples of annihilators, without even mentioning Samson and his jaw bone. Just before the advent of gun powder, Edward the First had a first class annihilator called "The War Wolf," with which to lay seige to Sterling. This annihilator was designed by his very best Ordnance experts and required five foremen and fifty carpenters to complete. Carpenters used to work in those days too. The War Wolf was a cross between a sling shot and a bow and arrow. Such prestige did the War Wolf have that the castle surrendered ahead of time, but Edward was not to be cheated of doing a little annihilating on the side and included in the terms of surrender the condition that his annihilator hurl a few large stones at the castle to see whether it really was a first-class destroyer.

Another instance of an annihilator about one thousand years before the War Wolf is that of the celebrated Archimedes, the Greek mathematician, who was working for the ancient city of Syracuse. When the Romans laid seige to Syracuse, Archimedes, who is best known by his statement that if he had a place upon which he could stand he could move the world by means of a lever, and who was a remarkable engineer is reputed to have accomplished the destruction of the Roman fleet by means of parabolic mirrors, which reflected and concentrated the sun's rays and burned the ships at a distance. He also constructed huge cranes, which would lift a Roman battleship out of the water when it came too close to the walls of the city and drop it, thus destroying them. We can imagine prophets of this day foretelling the uselessness of building battleships, as with Archimedes parabolic mirrors they could always be destroyed beyond bow and arrow range.

To quote a modern incident of a real annihilator, let us take the submarine. If the public is impressed with the destruction the bomb performed against the battleship in the recent bombing tests and is thereby convinced that this proves the end of the battleship, let us go back to the most dramatic incident of the war—when, under wartime conditions, a German submarine sank three crusiers of 12,000 tons each in a few minutes. In September, 1914 the British cruisers, the Cressy, Aboukir, and Hogue, were sunk in less than half an hour. The world stood aghast and everyone was convinced that this was the end of dreadnaughts. However, the Great War was fought for four years longer and no battleships were sunk by means of torpedoes from submarines because effective means of defense was found.

The battleship has not been the only weapon of warfare which has been threatened with extermination. At various times in history the supremacy of the rifle has also been threatened. The individually armed soldier, whom we usually consider as exemplifying the rifle has usually been the decisive factor in warfare in all ages. There was a period when a man on a horse with his lance was considered the decisive factor in battle. This idea fell by the way when the individually armed English archers littered up great battlefields with dead horses carrying tin plated men with spears. After several hundred years of reliance on the musket, artillery came to the fore and prophets again predicted the end of the rifle era. During the World War when it was found that the riflemen were still of great importance, tank prophets predicted the end of the rifle and the coming reign of the tank. And now last of all comes the aviator and bomb.

There was recently published in the most popular of the current magazines a feature story of a future battle which was decided by one side having all the tanks, all the gas, and all the planes. The other side merely having infantry with worthless gas masks, no information of the enemy, and a small amount of artillery, tanks and planes. The remark was made by an officer who had seen service in France that it is apparent that the author of this article had recently had luncheon with three prophets from the following branches: Air Service, Tank Corps, and the Chemical Warfare Service.

The first question that comes to the mind of the rifleman with regard to the recent publicity of the effectiveness of bombs against ships is "Why didn't the planes and bombs do this during the World War?" Let us examine what was done during the World War. We find that no battleships were sunk during the entire four years, although over 200,000 planes took part in this war. The air prophets account for the lack of bombing by saying that there were no large bombs available during the

war. As for this, the English had bombs up to 1,600 pounds, which are not to be sneered at since 1,100 pound bombs sank the Alabama in the first bombing test.

The press gave practically no publicity to the anti-aircraft defence in the World War against bombing. The figures show that the Italians during the Warld War brought down 129 planes by anti-aircraft fire, the Germans 1,520, and the French 500. In the year 1918, 483 German planes were sent to raid Paris, of which only 37 reached Paris and of this 37, 13 were brought down by anti-aircraft fire. In September 1918, 50 German planes tried to attack Paris and out of the 50, 47 were turned back by anti-aircraft artillery, three reaching the inner line of defense and one only being allowed to escape. This was the end of air raids on Paris, and five previous raids had shown even worse results. This defense of Paris was almost entirely made up of guns, searchlights, and anti-aircraft listening devices.

In 1916, the French had to fire 11,000 rounds for each plane brought down, in 1918, 7,500 rounds. If there is considered only the anti-aircraft guns in this firing, it was 3,200 rounds per plane. The British report shows 8,000 rounds in 1917; about 5,000 in 1918; and for the very latter part of 1918, 1,500. This may sound like very poor shooting, but it is in reality very good when compared to results obtained by ordinary artillery and infantry fire. Many thousands of rounds of shells and hundreds of thousands of rounds of rifle and machine gun fire is usually expended for each soldier killed.

This is all right, you may say, but aeroplanes and bombs have sunk battleships in the recent tests. The aeroplane and bomb being such a new thing brobably prevented their being used effectively during the World War. The answer to this is that the aeroplanes and bomb are not nearly as new as the anti-aircraft gun. The plane and the bomb have not been the only weapons improved since the World War.

Another thing that the average man does not understand is if the anti-aircraft gun was so effective during the World War why do our best known flying aces, publicly testify that they had no fear of anti-aircraft fire. Right here is where it will be necessary to go into a little more detail. The whole point with regard to the testimony of the aces about the ineffectiveness of anti-aircraft fire is the type of plane they were flying. For instance, planes are really divided into four classes. First, pursuit planes; second, attack planes; third, bombardment planes, or bombers; fourth, observation planes. The very names of these planes explains their use and mission. The pursuit plane is small, very speedy, and very manoeuvrable. It carries one man, who is armed with a machine gun fired through the propellor. This is the type of plane that most of our celebrated aces were flying and this is the one type of plane which is of little, or no interest, to anti-aircraft batteries because it cannot carry anything except very small bombs and is not ordinarily used for bombing. It is sometimes employed for attacking ground troops, in which case it carries very small bombs. This is the type of plane which is usually seen in stunt flying, so that the public is much impressed with the difficulty of hitting aeroplanes, as they can move so rapidly and turn, dive, and wheel so quickly.

The bomber on the other hand is a large, slow, unwieldly plane, which can neither move rapidly nor manoeuver readily. To bomb satisfactorily it must fly with or against the wind for a short period before it can drop its bombs. It therefore makes an ideal target for anti-aircraft guns. Therefore, when a flier testifies that he disregards anti-aircraft fire he should be asked whether he flew a bomber over anti-aircraft batteries during the World War.

Pursuit planes can be hit under certain favorable conditions and fortunately for ground troops it is only under these conditions that the plane is a real menace to them. For instance, when the pursuit plane makes a tremendous dive at a specific point, such as a machine gun pill box, battleship, or an anti-aircraft battery, it is then flying in a direct line towards the gun and no correction has to be made for angular movement, range, or velocity of the plane. In other words, when this type of plane can make its attack against ground or sea targets, unfortunately for the plane it is most vulnerable to anti-aircraft guns. Also, fortunately for the air prophets and to lurid press writers, this is the one type of target which cannot be fired upon during peace time. Training in anti-aircraft fire is accomplished by means of a plane towing a target, called a "sleeve." This target is a cloth funnel about 20 feet long and 5 feet in diameter at one end and 3 feet at the other. It is obvious that this sleeve can be fired upon only when the plane is not coming directly towards or away from the guns, that is with the plane, the sleeve, and the guns in the same straight line, because the plane would be hit as well as the sleeve.

A typical bombing anti-aircraft demonstration was staged at Fort Monroe early in March. The purpose of this exhibition was to prove that anti-aircraft fire could bring down planes. As a proof of this claim the test was a flat failure. In fact it only made the air prophets gleeful. The press, however, exaggerated the superiority of the bombing part of the demonstration over that of the anti-aircraft firing. The bombing started off by pursuit planes diving at a target off in the distance, presumably a battleship outlined on the ground. The pursuit planes fired their machine gun with tracer ammunition through the propellor and ended up by dropping a light bomb on the target. This was very spectacular as they started. This was followed later by regular bombing machines dropping larger bombs on the target. In a test of this nature it is impossible for the spectator to see how many hits are secured nor how many misses, neither is any report made giving specific information. There are undoubtedly a large number of hits because the plane is at liberty to fly as close to the target as it pleases and it always pleases.

In the anti-aircraft firing, however, it is quite apparent when misses are being made by the shells because the eyes of the spectator himself will tell him that a smoke puff far below and in the rear of the sleeve target is a miss. At Monroe there were less that 40 rounds of the 3-inch anti-aircraft artillery fired. Since there was only one target being fired upon at one time and but two guns used the probability was that there would be no hits and there was not. A test of this nature by ground artillery firing at a ground target would probably not secure any more hits on that size target.

In the machine gun firing at Monroe using tracer ammunition eight guns were used and the pattern of the shots as shown by the tracer apparently surrounded the sleeve. Later it was found there was only one hit. Anyone who has fired at clay pigeons can realize that they must be "lead" a certain amount in aim. In the case of the machine guns firing against the sleeve, the sleeve was traveling at 130 miles an hour on account of an extremely high wind and in order to get hits the tracer should have appeared above and in front of the sleeve. As it was undoubtedly all the shots passed below and at the rear of the sleeve. The getting of hits in anti-aircraft fire is more a question of training than anything else. In Hawaii anti-aircraft tests were very successful in puncturing sleeves. In fact the hits excelled the probability factor.

It is rare that an individual bombing plane would be fired at by anti-aircraft guns. Usually the firing would be against a large formation of bombers and using a large number of guns.

One or two guns firing against a single plane may not show results in actual hits any more than one or two machine guns firing against a machine gun nest may fail to obtain hits. No one advocates doing away with the machine guns, however.

In the anti-aircraft tests at Monroe, the aviators stated that they were required to fly over a restricted area and that this was a big advantage to the anti-aircraft battery. On the other hand, the anti-aircraft gunners stated this was more of a handicap to them than it was to the planes because the plane would be outside the restricted area before they were enabled to make their corrections. The reason for the restricted area condition was on account of safety to surrounding territory.

Bombing a battleship which is anchored and which is not using its anti-aircraft guns is like a rifleman shooting at a large fat cow tied to a target and on which he is allowed sighting shots and also having each shot marked with a spotter.

Some of the statements which are often made by air enthusiasts are quite misleading. For instance, the alleged fact that a battleship can be sunk in 30 seconds. What he really means is that after a battleship has been bombed for hours and an obsolete type of battleship at that, that 30 seconds after the last bomb has gone off with the ship about to disappear beneath the waves it finally sinks. This is analagous to hunting moose and after

shooting a moose full of lead for several hours, finally to come up and just as the poor beast is about to expire, put in a finishing shot and then brag how you killed a moose in a fraction of a second.

In the peace time dropping of bombs on battleships sometimes delay of weeks has occurred to obtain suitable weather. Before dropping the bombs, the bombers usually make a number of trial flights over the ship for preliminary sighting. It takes a long time for a bomber to climb to sufficient altitude to bomb.

Articles have been published showing the time that it takes a fast pursuit plane to leave the ground and reach a given point and drop light bombs and letting it be inferred that a bomber with a heavy bomb makes the same time. It is well known that a fast plane can travel a couple of hundreds of miles an hour but bombers will do well when traveling without the assistance of the wind if they make a hundred miles an hour. While the bomber has the advantage over the gun that its range is limited only by the amount of gasoline it can carry, it has the big disadvantage that it can only carry sufficient ammunition for one shot in the case of a large bomb. A gun which has only one round of ammunition would be looked at as ridiculous.

If anyone has an idea that it is not difficult to bomb, let him try the following experiment. From a height of five feet try to drop a pellet about the size of bird shot on to a circle about a fifth of an inch in diameter. A fifth of an inch is smaller than the diameter of the average lead pencil. This is equivalent to viewing a 50-foot circle at an altitude of 15,000 feet, which is assumed to be the height at which day bombing is supposed to take place. In order to better realize the difficulty of bombing, a shot should not be dropped while you are standing still, but while you are in motion as the bomber is really shooting from a swinging platform, at a rapidly moving target, and he cannot direct his shot except by indicating to the pilot in the plane to change his direction.

It is really remarkable that an aeroplane dropping a bomb or an anti-aircraft gun firing at a plane ever makes hits.

During the first bombing tests, those of 1921, against the Alabama and the ex-German ships, best results with the bombs were obtained when they were dropped alongside instead of hitting the vessels direct. During the more recent tests, those of 1923 against the New Jersey and Virginia, bombs dropped alongside were not nearly as effective as the direct hits. From this the air prophets state that a bomb dropped either alongside or a direct hit, will destroy a ship. The naval experts arguing from the same tests say that since a bomb dropped alongside the New Jersey and the Virginia were not able to sink them, and since the ones dropped on the Alabama did not sink it, this proves that neither method will sink the ship.

Another vital difference between the bomb and the armour piercing shell fired from a big gun is that a bomb cannot be made to puncture very heavy armour because it cannot be given velocity enough, even when it is dropped from as great a height as a bombing plane can carry a heavy bomb, which is not so very high. The bomb has not got velocity enough to penetrate anywhere near the amount of armour an armour piercing shell will penetrate, and if the bomb is made like an armour piercing shell it will not have very much explosive, as the bomb walls must be made so thick.

Future battleships will undoubtedly have enough deck armour so that the bombs will not penetrate.

Much ado is made about the fact that the Navy dropped sand loaded bombs on the battleship "Washington," and it was stated that they were afraid to drop loaded ones. It should be obvious to anyone with common sense that the reason the Navy dropped sand loaded bombs was to determine how much of the armoured deck the bomb would penetrate —if the bomb went off this never could be learned.

Pictures have appeared in the press showing a smoke screen over a battleship and asking where are the anti-aircraft guns now, meaning that the smoke screen has blinded the anti-aircraft guns when the aeroplane was laying the smoke screen, as it must come down to within a few hundred feet of the water to lay the smoke screen. On a windy day a smoke screen lasts but a few moments. On a perfectly calm day after it has once been laid, it is extremely effective.

In recent tests searchlights failed to pick out planes at night. The question is, What kind of planes? If they were pursuit planes, and these are the kind that are generally used to prove that a plane cannot be picked up by the beams of a searchlight, it is of no importance. If it were a bombing plane flying alone, it is not of very much importance, but if searchlights failed to pick up a formation of bombing planes, it would be serious. It might be pointed out that a formation with bombing planes flying ready to bomb are not only readily located but are unable to manoeuver in order to avoid the searchlights.

We are also told that in the next war radio control of planes will drop great quantities of gas bombs and high explosive bombs on cities. It should be obvious that if it is difficult to bomb with a man in the machine that it is going to be still more difficult when no one is there. To realize the difficulty of this repeat the test with a bird shot, but in this case stand in one room and have somebody else do the dropping by walking into another room which has been darkened with you giving the directions when and where to drop. You can control the person in the other room perfectly by saying, "Walk to the right," or "Left," or "Go ahead, walk backwards," etc., but how will you tell the person in the next room when and where to drop the shot? Even the radio compass will not determine the position of a fast moving plane near enough for approximate bombing. Moreover, one pursuit plane with light bombs can fly over a hundred radio bombing planes and destroy each one one at a time without danger to itself.

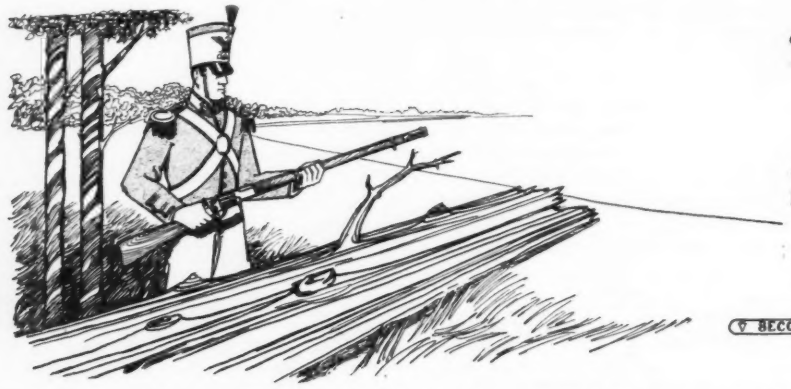
The effectiveness of bombs is quite limited in extent and except for bombing battleships, it would be better to have larger number of smaller bombs than one huge bomb. Bombs have been dropped alongside buildings without destroying the building and it is probable that bombs larger than the largest bombers can carry at the present time will not destroy more than the one building which they would be likely to strike.

Much publicity has also been given to the claim that this country only had nineteen planes suitable for war. Of course what was meant but which was not explained in the papers was that this country only had nineteen of the very latest pursuit planes, but on the basis that these were the only planes fit for war then the Army had but twenty shoulder rifles and hardly a battery of artillery with no suitable anti-aircraft guns. The twenty shoulder rifles were the recently completed semi-automatic shoulder rifles which are under test, with a view to replace the Springfield in the next war. Of course this is absurd. All of the vast supply of rifles left over from the war are perfectly suitable, although not nearly as good as a new semi-automatic. In the same way, this country has, as was shown in the testimony, at least one thousand planes which are just as suitable for war as the World War stock of rifles.

Another point that is often made by the advocates of the supremacy of the air forces is relative cost between planes and battleships. A favorite comparison is to state the cost of the battleship at forty million dollars, and assuming that made in quantity at least one thousand bombers could be made for this money. Bringing up the question of relative cost is a foolish one inasmuch as there have been huge quantities of sums sunk in aircraft without any such vast number of planes on hand as would be obtained by dividing the total money spent by the cost of a single plane, but it might be mentioned here that a battleship lasts twenty years and provides a home for fifteen hundred men, including everything that an ordinary citizen enjoys—such as food, quarters, recreation, etc. One thousand bombers while requiring a crew of at least two thousand men for the operation of the plane itself does not provide anything else and necessitates an additional five or six thousand men and auxiliary equipment, etc. Moreover, apparently the life of a plane is extremely limited.

Now, getting back to our original proposition, is the rifle obsolete, there is one other phase of aircraft and the rifle which has not been shown. That is pursuit planes and attack planes in the World War occasionally flew down over bodies of troops and shot them up. In the next war it is said this will be very common. However, if the ground troops are armed with semi-automatic rifles and are trained in aeroplane firing so that they understand the proper lead and use tracer ammunition any plane that attempts such stunts may come to grief. Such training would be very popular with riflemen as it would be like clay pigeon shooting on a far grander scale.

It therefore appears to the writer that the battleship will linger (*Concluded on page 15*)



▽ SECOND SEMINOLE WAR. 1837.

The American Rifleman

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Published semi-monthly on the first and fifteenth days at
1108 Woodward Bldg., Washington, D. C.,
By The National Rifle Association

The second Seminole War opened in 1835 and lasted through five long years of swamp and jungle warfare. It was in this year that Major Dade and his whole command was wiped out to a man on the Withlacoochee River. This was probably the most signal and complete defeat ever put over by the Indians on a white expedition, except Custer's. With the year of 1837 Colonel Sam Colt came out with a new revolving rifle which, through the influence of Major Harney, were issued to his command for use in operation against the hostiles. Could this new weapon have saved Dade two years earlier, *quien sabe?*

THE first article in the creed of this office is opposition to ill-considered firearms legislation, which would disarm the honest man and fail to deprive the crook of his "gat."

Get that word "ill-considered." THE AMERICAN RIFLEMAN does not oppose wise regulatory measures with regard to powerful weapons in crowded communities.

You Can't Fool Editors all the Time

No body of men in the country understands the need for wise regulation better than this staff. For months we have carried on this opposition, not because it is our job—although it is part of our job,—but because of an ingrained conviction that laws of the Sullivan type simply play into the hands of the underworld and defeat the public welfare.

It has been a matter of grave concern that so much has been said by newspapers, some of which are of high standing and wide influence, in behalf of prohibitory laws affecting the sale and ownership of arms suitable for home protection. We have wondered at the lack of logic displayed in many of these emanations, upon a subject which is not controversial, but simply requires cool judgment of plentiful evidence.

But now the tide of editorial opinion appears to be turning toward a saner view of the rights of the citizen. Our May 1 issue commented upon a robust statement from the *Worcester Evening Gazette,* which every legislator and every editor should read. The *Philadelphia Record* of April 24 contains another editorial, so irrefutable that it is reproduced here in full.

FUTILE LEGISLATION

Well-meaning editors, some of whom direct the policies of very large and influential publications, are still hard at work in various sections of the country agitating for legislation to prohibit the sale of firearms, or more specifically small arms, as a means of repressing crimes of violence.

Their reasoning is very simple. The pistol is a commanding weapon in the hands of evil-doers. It enables persons of wicked intent to compel others to do their bidding. Worse still, it is the principal agency of murder and suicide. Given a pistol, readily accessible, and a hot temper, and even an ordinarily exemplary citizen may become a homicide. The remedy seems to some people to be very obvious. Abolish the sale of small arms, and you at once weaken the power of the criminal and save life.

Similar processes of reasoning brought on prohibition. Of the actual results of the law forbidding the manufacture and sale of intoxicants it is needless to speak. We need not lean on an analogy; we have actual experience in regard to the prohibition of firearms, furnished by the State of New York.

Have crimes of violence deminished in New York since the enactment of the Sullivan law? Is the underworld disarmed along with law-abiding citizens whose only use for pistols and revolvers is the protection of their homes and property? Are the forbidden weapons difficult to procure?

It seems to us that "business as usual" is the watchword with the criminal eliment in New York—that murderers and hold-ups continue, and gangsters still slaughter their victims, in spite of the Sullivan law. True, we have no statistics on the subject, and rely only upon what we read in the newspapers, one of which, now lying before us, relates how five bandits, each armed with a revolver, held up a pawnshop in Brooklyn and robbed the proprietor of $30,000.

In our judgement, the logic which proposes to stop crime by eliminating the weapon with which most of it is accomplished is false, because the elimination cannot be accomplished by law. Shall we forbid the manufacture and sale of automobiles because they are today almost indispensable aids to many types of crime, and are also potent factors in undermining the morals of many young folks? We have tried to combat the evil of intemperance by drastic legislation. Has our success been so encouraging as to suggest that we shall butt our heads against another stone wall?

Prohibition of firearms by law would be futile. Regulation of their possession by State law is equally useless as a measure to restrict crime. Regulation—not prohibition—by Federal law is perhaps the only means by which the objects of the present agitators could be even partially accomplished; and we very much doubt the possibility of enforcing against the inherently lawless any law calculated to deprive them of a weapon that may be easily concealed and so readily transported as the ordinary pistol or revolver.

THE AMERICAN RIFLEMAN may be accused of bias in its campaign for home protection. That handicap is imposed upon us by the nature of the case. But no one can accuse the *Gazette* and the *Record* of partizanship. So long as journals of their standing join forces with us there will be little hope for the success of unwise legislation upon the possession and use of arms. But more such statements are needed to make sure that America shall not be a nation disarmed, and at the mercy of its lowest elements.

Riflemen, how do your local editors stand on this subject? Do you know? Do you care? You could do no better turn for your own community this week than to lay before them the unbiased opinions of two high grade American newspapers.

Entered as second-class matter, April 1, 1908, at the postoffice at Washington, D. C., under Act of Congress March 3, 1879. Obtainable by subscription, $3.00 per year. $2.00 to individuals or members of clubs affiliated with the N. R. A. Canadian subscription, $3.50. Foreign, $4.25.

Pistol Training

(*Continued from page 6*)

flinch. The jerk, however, is the worst enemy of the pistol. The average man can hold the rifle steady on the bull and thus has not the incentive to jerk. Almost no one can hold the pistol to the bull long enough for a normal squeeze, and therefore the incentive to jerk before it wabbles off is overpowering. Given the average man with his trembling, unsteady hand, a bull on which he cannot hold but *wants to hit* and you have given him every practical incentive to jerk or snap shoot. All this in spite of the most practical and convincing instruction regarding the trigger squeeze.

In providing a solution to the probelm the following is offered as a simple method of assisting the man by removing the incentive to snap shoot during the habit forming period of his first firing. All that can be said for it is that it is simple, and that I have tried it, and it works. Briefly, it consists of emphasizing trigger squeeze and not aim, and in removing any incentive to snap shoot by starting the man off on a target on which he can hold without difficulty.

Instruction practice follows closely the prescribed methods, except that the sighting and aiming instruction consists of showing a man a man a sighting bar with the sights properly aligned, and stating that this is what should be tried for. No mention is made of "correct" and "incorrect" sights, and no triangle work is done.

During the entire training no mention was made of a bull's-eye. If it had to be mentioned it was called an "aiming mark." It was there as a mark to show the center of the target. There was no inducement given to hit the bull at any time. Such remarks, even after firing was well under way, as "It's a bull," or "You almost got a bull," were prohibited. It took a lot of pains, but it eliminated that desire to "hit the bull" that is responsible for more poor shots than any other thing.

During all firing the regulation regarding coaches, etc., were carefully observed, and dummies were used continuously.

For the first firing a line of targets was set up with a page from a *Saturday Evening Post* pasted on each frame. The beginners formed at 10 yards and fired to hit the page. Now a *Saturday Evening Post* page at 10 yards is a pretty big target. It takes no effort for even the most trembling hand to hold inside its limits. All they had to do was hit the page. And they did. They did it because there was no tantalizing bull jumping around on their sights to worry them and tease them and destroy their confidence. Every one could hold within the area, and forgetting the aim could concentrate on the trigger squeeze. And the first clip established the habit of trigger squeeze.

We moved back to fifteen yards and fired again at the same target. The results were excellent. We changed to a *Literary Digest* page. Now a *Literary Digest* page looms up pretty big at fifteen yards. Try it yourself. It's hard to get out of. It takes no effort to stay in. And yet a man who keeps his shots within that relative area will not only qualify with ease, but will very probably make expert. It sounds unbelievable. We were shooting for groups and we got them. Being able to hold within the area there was no incentive to snap shoot. The trigger squeeze was becoming a habit. Practically every man could consistently keep his whole group within the page. I have seen many a man in other years fire at the bull at fifteen yards and miss the entire target.

Next, pages were selected with a picture near the center. These pictures were too small to even suggest their use as a mark for anything else than in assisting the man in his aim. He was not asked to hit the mark. He was not asked to hold his sights on the mark. He was told that the mark was there to indicate the center of the page so that he could more easily keep his sights near the center. Thus they were being prepared for the bull's-eye target without developing the danger of shooting for the bull and its natural consequence, snap shooting. Bull's-eyes would now be a help to them and not a hinderance.

The remainder of the training was much the same as that prescribed. In all instruction firing at the "L" target the scores were recorded in the manner of rapid-fire scores, except that they were scored *backwards* and relative standings published according to the value of the score as read as a number. Thus the premium was placed on the low shot and not the good shots, and consistent steady shooting always beat lucky strings. It also avoided the "hit the bull" attitude. I believe it helped establish the value of the shot groups.

The scores of even the experienced and skilled shots were improved, as a matter of experiment, by the following devices. At fifteen yards, both slow and rapid, the standard five-inch bull was used. At twenty-five yards we pasted a complete square of black pasters over the bull, thus giving a much larger aiming mark. At fifty yards a white square of pasters was placed over the bull thus obliterating the aiming mark, and aimed for the center of the target. This was not as difficult as might be supposed because the target at that distance lay well within a restricted field of vision and the converging lines of scoring space figures and the larger concentric circles made it easy to locate the approximate center. In both cases the experienced shots improved their scores, and commented upon the relief in not having a small tantalizing bull taunting them with a "now you have me; now you haven't."

An effort was made to eliminate the prolonged aim. It seems that many men like to aim at the bull a long time before they even begin the squeeze. This may be all right for the so-called "nuts," but it is a dangerous practice for the ordinary man. It results in tired arms and strained eyes and nerves. It soon degenerates into a series of very slight jerks each time the sights catch until finally one goes off. Its greatest danger for the beginner lies in the fact that it again emphasizes the aim and the desire to hit the bull, and breeds a hesitation to fire at any time when the sights are not exactly on the bull. It thus makes the aim and not the squeeze the dominating factor, and its logical result is snap shooting. Such a man, even when successful at slow fire, usually pays for it at quick and rapid fire. From three to five seconds from the time the extension is complete to the time the shot is fired is best for most men.

Instill into the men a desire to hit the bull, give them a bull that they can't hold on, and all the trigger squeeze talk in the world fails to stop them from snap shooting. The aim must be subordinate to the squeeze. Did you ever as a "kid" hold a firecracker in the tips of your fingers, light it, turn your head, and wait for it to go off? That is the principle of pistol shooting. Point your gun toward the target, begin a normal trigger squeeze, and while squeezing keep the sights as near the bull as possible until it goes off. It will be a good shot and you will qualify high.

[Courtesy *Infantry Journal*]

Bullets and Bombs

(*Continued from page 13*)

a little longer as the backbone of the fleet and that the rifle will linger longer yet as the staff of life of the Infantry. It may be noted that at the recent Disarmament Conference the naval experts of all the great powers agreed that the battleship was the most important element. Surely they cannot all be wrong.

In the World War it was found at such places as Verdun that although great quantities of high explosive shells literally demolished the surface of the earth, yet it was necessary for the ground to be actually occupied by Infantry, as after the firing had ceased they would have to drive out opposing Infantry who had remained alive and in position in spite of the terrible destruction. No doubt this will again occur. All the bombs in the world cannot drive men out of occupied positions. It may be necessary to dig deeper bomb proofs, but in the end no amount of high explosive shells or bombing from above can drive out men except other men on foot with rifles.

In conclusion, the writer would like to state that nothing has been included in the foregoing article which has not been given out before, mostly however in technical magazines, such as *Army Ordnance*. The anti-aircraft side of the question not being "news" in the sense that bombs are has been more or less neglected by the press.

It would be a great calamity if anti-aircraft development ceased. It would also be an even greater calamity if development of air forces was slowed up. Our air forces when it comes to flying and to bombing are in a class by themselves. The writer does not wish to give the impression that our bombers are inefficient. The contrary is the truth, but the difficulties of bombing have usually been minimized and the average reader does not realize in reality how good our bombers are.

In Kishtwar

(*Continued from page 5*)

ten inches in length, by five to six inches in girth at the base. Mine measured slightly under nine inches, though a little had been rubbed from the tips by a fall. The serow frequents heavily timbered country and is seldom found in the open. It is shy and makes difficult stalking. Being mostly goat by nature, it climbs well and makes excellent time either up or down hill, though its gait is awkward.

I was out one day with two local natives who had reported having seen serow the day before. They were excitable chaps and I found it difficult to keep them from attempting to force the stalk when wind and all conditions were adverse. As they knew almost no English, while my Hindustani was little better, there was much sign-talk before I got it across to them that I would not take long chance shots at anything that moved in the trees. Finally we came to an understanding and were able to proceed. One of these natives, who was in the lead, suddenly dropped flat and began to wildly wave me forward. His eyes were almost popping out of his head with excitement, and his hand trembled as he pointed into a thick clump of bushes, where I could see nothing that looked the slightest bit like an animal. He was correct, however, for two serow jumped out of the covert and made off down the hill. The two *wallahs* with me danced about, clutched at me and my rifle and screamed the only English word they seemed to know, "shoot." It was so funny that I sat down and laughed, much to their disgust. We worked our way down the hill and shortly discovered the two serow on a ledge, some sixty yards below us. They were partially behind a jutting rock and did not give as clear a shot as I would have liked. They had seen us, however, and while appearing more curious than alarmed, I did not think it good enough to risk frightening them by trying to better my position. I fired at the nearer, which was noticeably the larger of the two. At the shot they disappeared around the rocks, but by moving down to a lower position we located the wounded one on a flat ledge that ended in a cliff. From my position the rock looked horizontal, so, as the animal was not dead, I fired again, hoping to kill it outright. I did kill it, but unfortunately the rock was sloping and he rolled over the edge. It was a fall of some seventy-five feet to the boulders below, but the head came through with slight damage, though the horns were broken loose from the skull. My savages beat me down to the kill and when I arrived, had already made *hallal*, the throat-cutting ceremony that all good Mohammedans must do in order that the meat may be eatable for them. eatable for them.

Coolies Packing Out Himalayan Bear

This *hallal* is one of the things that any hunter, who wishes to have head-skins fit to mount, must be prepared to fight in a Mohammedan country. In Africa, the natives, who are only theoretical Mohammedans, are content to stick a long skinning-knife into the throat, turning it around to properly bleed the carcass. This does not injure the skin for mounting. But in Kashmir this is not enough. They cut the throat from ear to ear, absolutely ruining it for mounting. I had been warned to be on the watch for this ceremony, so had told my regular staff that it would no be permitted. I then offered to buy them a local tame sheep from time to time when fresh meat was needed, a they could not touch un-bled meat. But in the case of the serow, I did not have my regular men along and had forgotten to warn the "savages." Fortunately, however, the long beard of the animal will largely hide the damage.

I have tried to give, in this and in the previous articles on "Shikar Days in the Himalaya," only a brief outline of the country, the people and the game. Naturally, there is much that could be added; details that might be of assistance to anyone contemplating a trip to that wonderful country, which is so little known among the shooting fraternity in America. If, however, what I have been able to say has been of interest to a few of those who love the hills, I shall feel quite satisfied.

A New Idea In Aiming Instruction

By Lt. B. V. Field, 38th Inf.

ABOUT this time of the year many organization commanders in the various units composing the Army of the United States are confronted with the problem of properly instructing their recruits and the otherwise unqualified rifle shots for the coming season's rifle practice.

It is well agreed that this problem of teaching the beginning in the intricacies of good rifle shooting is principally getting across to the pupil the three big ideas of aiming, holding and squeezing. My article deals with the first problem only.

To teach our beginners to properly align the sights we have used the sighting bar with an adjustable piece of tin representing the peep sight and a blade on the front end of the bar representing the front sight. At the rear end of our sighting bar we have another bar of tin the same as the front sight with a small hole punched therein at which the pupil places his eye and is told to observe the alignment of the sights as presented by the instructor. The difficulty experienced has been in keeping the adjustable center or peep sight in proper relation to the front sight and getting across to the recruit what the whole performance is about.

Teaching the recruit proper aiming with the service rifle as issued is also a difficult matter as he does not always place his eyes behind the rear sight in the same position as the instructor sees them.

How then, are we to properly instruct the recruits in the matters of sight alignment?

It is my good fortune to have two "as issued" Springfields to which there have been added the Lyman No. 48 receiver sights with discs. Undoubtedly many of my readers are also so equipped. This equipment provides excellent means for imparting proper instruction in sight alignment with none of the disadvantages of the sighting bar except the purchasing of the Lyman sight.

By leaving the folding leaf sight on the rifle as it is issued, in addition to the Lyman receiver sight, and by aligning the two rear sights with the front sight we can hand to the beginner a real rifle with real sights that can not jar out of place, do not call on his imagination to get the idea and force him to see the alignment as the instructor presents it to him. We then can test the beginner's the drift slide on the folding leaf sight and knowledge by the simple matter of moving turning the windage screw so as to throw the sights out of alignment and then requiring him to place the sights again in proper alignment. Thus he is required to use the windage screw and adjust the drift slide which instruction is also beneficial.

The use of the rifle as described in a fixed rest whereby the sights can be aligned on a movable bull's-eye also is beneficial and conducive to quick and excellent results in the matter of teaching proper alignment on the bull's-eye. Here again the value of the Lyman sight is apparent as it makes certain that the recruit's eye is exactly in the same position as the instructor's when he made the alignment and required the recruit to observe the same.

I have used this idea in the summer training camps with excellent results; and what else counts, may I ask?

Can Larger Bores Come Back?

(*Continued from page 2*)

At present the .250-3000 Savage cartridge comes closer to meeting such needs than do any others. The regular factory cartridges are very accurate and are powerful enough for the heavier work mentioned. Because of the relatively slow twist, one turn in fourteen inches, this cartridge and rifle can be reloaded with modern bulk powders and cast bullets to give .25-20 single-shot ballistics, than which there is no better cartridge for small game.

There are four rifles shooting this cartridge: the Savage 1899 lever action model, the Savage 1920 bolt action model, and the short Mauser actions made for this by Hoffman and by Griffin and Howe. For reloading, which is necessary in order to have any rifle really approach that mysticism known as an all-around rifle, the lever action cannot be considered. The special arms made by Hoffman and by Griffin and Howe cannot be surpassed for use with this cartridge, if one has the necessary money to pay for them, but the average man cannot well afford such arms. We have, then, only the Savage bolt action left for consideration.

The Savage bolt action rifle for the .250-3000 cartridge is very accurate, excellent in weight and balance, simple, durable, and can be easily fitted with very good aperture sights. In fact it is everything desired, with just one exception; it is not as reliable as it might be.

This rifle's principle fault is its lack of a good bolt stop. One who is accustomed to the Springfield, Krag, Mauser, or Mannlicher rifles is very apt to pull the bolt entirely out of the rifle in this model. I have had this happen and know of many others who have had the same experience. One of these, a man who is a notable expert in saying quaintly profane things, was given the greatest inspiration of his life when he pulled the bolt entirely from the Savage rifle he was shooting and was struck vigorously on the bridge of the nose by the bolt body.

Other faults are but minor ones. The safety is not as reliable as those found on military rifles, sliding off and on too easily after the arm has been much used. The magazine could be well built of slightly heavier stock and the cocking piece should also be made of heavier construction in order to insure more positive firing. For the uses to which this rifle and cartridge should be limited, these are not serious faults, perhaps, but they are certainly great disadvantages. I have made this criticism not for the purpose of finding fault but because I wish to express the opinions of many hunters, myself included, for whom this would be an almost perfect rifle for everyday use, if these faults be done away with.

For my second rifle I would choose one of .28 or .30 caliber of extreme accuracy, good weight—eight or nine pounds—and good balance, and a trajectory and killing power suiting it to all but the largest American big game over practically any range. This would be my sheep, goat, and antelope rifle and could be used for all deer, black bear, and elk. It could be used for larger bear and moose, although I'd prefer a larger bore for these. For such uses the 7 mm. .30-06 and other cartridges of similar design, and of the same approximate caliber, cannot be surpassed. They have unexcelled accuracy, the finest of trajectories, killing power for short or long ranges which are able to take care of all but our largest game with ease, and the American made bolt action rifles in which they are made have little to be desired.

I'd have one genuine big bore rifle; one which would knock down anything in America and most things elsewhere. With such a rifle loading would be desirable since cartridges for it could not be purchased through the N.R.A. as cartridges may be purchased for the .30-06. The two most desirable rifles for this, in my opinion, are the .450 Winchester and the .400 Whelen, shooting the 300 grain bullet through a barrel having a 14-inch twist. With standard loads they have excellent accuracies at most practicable ranges and are excellent killers, much like the old .40-70 Sharps and Ballards, even with black powder and lead ball.

In a brushy country, where deer and bear are shot at short ranges, I'd have a .45-70, .44-40, or .38-55. It seems likely, since some States are contemplating the outlawing of rifles shooting metal-jacketed bullets, that such cartridges may come back to their former popularity. If many States pass such a law, we may again have the '86 Winchester in the .45-70 and .45-90.

For ranges up to 200 yards the more powerful of the .40 and .45 caliber cartridges for the Sharps', Remington, Winchester, Ballard, and Springfield rifles can kill effectively any game on the continent. Under such distances, in the hands of a skilled shot, they are certainly the equal of any modern American sporting cartridges. A sportsman hunting in a country affording no longer shots than 200 yards may well be content with his arm, but one might spoil an expensive hunting trip by their use when a better trajectory might be demanded by more open country. For target uses, and for just shooting and experimenting, they are certainly worthy of consideration, but for hunting uses they are hardly better than I have declared them to be.

In any part of America I could get along very well with just these three rifles, and for most year-'round shooting the light .250-3000 would be all I would ever need. Some of us who would like to experiment do all sorts of funny things. I've even shot cottontails with a .405 Winchester and prairie dogs with a .45 Sharps'. But, when one pauses to realize that twenty-five .45 Sharps' bullets weigh close to two pounds while a pound of lead will make around eighty-five .25-20 bullets, with powder in proportion, its a lot cheaper to use the .25 caliber rifle. If one must shoot a really big bore rifle, it is better to shoot it at a backstop which will hold the lead for the melting pot, instead of lead plating the whole country.

In conclusion I must again ask, how can the larger bores come back? It is true that many men shoot big game with arms which are not sufficiently powerful for the purpose, but these men, even if they turn to more powerful arms, will not adopt really large bores. Large bores with really satisfactory trajectories kick too much. And, for most of us, big game shooting constitutes about one per cent of all our shooting. For small game and vermin the small bore rifle will more than suffice and is less expensive to shoot.

Hoffman-Martini Small Bore

(*Continued from page 9*)

raising the rear sight until it was in the scope sight line, and then making a clamp, like that which holds the Otway optical sight, to grip the front of the barrel and hold a Winchester globe sight in the same line. With the scope on, the iron front sight is removed and the disc is taken out of the rear sight. When the scope sight is off, the iron front sight is clamped on, and as the iron sights are in the same line, the fit is still perfect.

Another thing in this experimental job is a big bump on the fore-end, under the front sling swivel. This relieves the back of the hand of much useless sling pressure and gives a very solid stop for the hand. It greatly increases steadiness, and adds somewhat to comfort. A sling swivel was never designed by nature to serve as an abutment for the hand and it would be hard to figure out a worse one from the standpoint of either comfort or solidity.

After shooting the experimental rifle for some months, I ordered from the Hoffman Arms Company a Hoffman-Martini with a Hoffman pistol grip worked in but otherwise an exact copy of the soft wood job. It has a Lyman 48 sight with a long stem to bring the disc to the scope sight line, and uses the same clamp-on metallic front sight. With these rifles I can lie prone with every muscle limp, and the cross hairs stay in the center of the bull. Indeed, so well do they fit that I can let go entirely with my right hand and the cross hairs stay where they belong. The butt plate, cheek piece, fore-end-bump and sling hold me and the gun absolutely rigid. My right hand has only to press the trigger.

The stock of the Hoffman-Martini, shown in the photograph, is a beautiful piece of wood work in Circassian Walnut and is a joy to look at, except that the dimensions are so queer it looks a bit awkard. But it is comfortable beyond belief and the rifle certainly does shoot. The first hundred shots at 25 yards after sighting in were all tens, and while a run of a hundred tens isn't much for some folks, it is very good for me. Over half the groups were a half inch or less from outside to outside and several were noticeably less than this. Two or three groups of the first ten were well within the Hoffman Arms Company's guarantee to shoot groups one-fourth inch between centers at 25 yards. The barrel is extremely accurate, and the stock is best characterized by a remark of Grove Wotkyns after trying the soft wood job at Perry, "That stock is the best I ever tried and certainly should give the full benefit of all the barrel is capable of." The lock is a B. S. A.-Martini, the fastest action known. With a Lyman 48 rear sight, a Winchester globe front sight, a Fecker 10-X scope, a 1922 Springfield butt plate, Springfield swivels and service sling, I don't know how to better it.

Conducted by C. B. Lister

NATIONAL RIFLE DAY, SATURDAY, JUNE 6

NATIONAL Rifle Day last year was a new venture. Many clubs did not quite know how to go about it, and some clubs did not think they could get away with it. Nevertheless, National Rifle Day, 1924, helped to promote the rifle shooting game. For this reason it will be repeated on Saturday, June 6, this year. The Lawrence Park Rifle Club, at Erie, Pennsylvania, last year staked a successful celebration with the support of the Erie *Times*. They raised the necessary funds to send a youngster to Camp Perry.

The Columbus Business Men's R. C., Columbus, Ohio, obtained backing by the Kiwanis Club, put over the celebration successfully, and sent a junior representative to Camp Perry. The Big Lake, Minnesota, Club could not celebrate on Saturday last year, so they staged their National Rifle Day on Sunday. They aroused plenty of local interest, and got several new members. Bellingham, Washington, put across a real program, and the president of the club afterwards reported that he had never enjoyed any shooting event so well. The Mound City Club, of St. Louis, Missouri, had a wonderful time last year. Another club reported an immediate gain of five new members before their range closed for the day. In New Haven, Connecticut, the turnout almost swamped the management. As a matter of fact, in practically every community where any attempt was made to stage National Rifle Day the attempt went over big.

This year it should be more of a success than ever. The following suggested program is published for the assistance of every club or individual member who is interested in the proposition. It is hoped to be able to distribute folders summarizing this data, but do not wait for the folders. Go to work on the strength of the following schedule.

Enrolment.—We believe that a committee will do well to have enrolment blanks and an enrolment fee even though it be as little as 10c. Print on the enrolment blanks the various events which you are to have and have your contestant check the events in which he desires to take part. Have all applications in not later than the night before the event.

The Match.—We recommend that you hold the Local Championship Match in the morning and the Novelty Matches in the afternoon. Unit Matches, Father and Son Matches and other shoulder-to-shoulder matches may be planned. Any group desiring to hold such a match even though the town is not organized, may do so by writing to National Headquarters of the W. J. R. C. for material. Targets will be furnished gratis by National Headquarters to all those who send in for them in sufficient time to get them back to the location. These targets will all be marked National Rifle Day. Only targets thus marked will be official unless special permission is given from National Headquarters. The following are the official rules for conducting the Local Championship Match which will determine who will be sent by a city to Camp Perry, Ohio, to take part in the National Individual Matches.

Shooting Rules

Eligibiliy.—Open to any boy or girl not over 18 years of age who have properly enrolled with the committee in charge.

When Fired.—June 6, 1925.

Entry Closed.—June 5, 1925.

Range.—50 feet.

Position.—Prone, sitting, kneeling and standing. 40 shots—10 prone, 10 kneeling, 10 sitting, 10 standing.

Targets.—The W. J. R. C. Official 50 foot target, with A. B. and C. rings in the bull's-eye will be used, five shots on each target.

Rifle.—Any .22 caliber rifle.

Ammunition.—Any .22 caliber ammunition.

Sights.—Any sight not telescopic.

Scoring.—W. J. R. C. scoring rules will be used as given on page 45 of the Instructor's Manual.

Place of Shooting.—Any 50 foot range selected by the committee in charge. An indoor or outdoor range may be used.

Ties.—A. B. and C. circles will be used to decide ties and if a tie shall exist after scoring in this manner, the individuals thus tied will shoot again.

Prizes.—The winner of the Local Championship Match shall be local champion and will be sent by the city or town to the National Matches at Camp Perry, Ohio, in the early fall if the committee can finance it. The junior shoulder-to-shoulder matches are conducted during the first week of the National Matches and in a regular camp, with sports such as games, swimming, entertainments, etc., held for one week directed by the National Headquarters of the W. J. R. C. A boy or girl or both may be sent. It is understood that Uncle Sam will furnish the housing, necessary bedding, etc. Special prizes may be provided for the community shoot any afternoon if desired. Other local prizes for the Class A, B and C Matches, if such are planned, may be provided by the committee

How to Join in This Nation-Wide Demonstration

The purpose of National Rifle Day is to focus nation-wide attention for one day on this sport which has been steadily growing in popularity during recent years and now gives promise of assuming its old role as one of America's national pastimes.

The program is suggestive only. Matches which have strong appeal in one community will not draw a crowd in other localities. Use your own judgment. If you are equipped to take care of youngsters, feature their section of the program. Dad will usually come out with his boy, then you have two prospects. If you cannot get the local Y. M. C. A. Secretary, W. J. R. C. Unit Instructor, or some one else who is accustomed to handling boys, better leave the junior section out. Youngsters have to be handled differently from older shooters, and you do not want anyone hurt either physically or via their feelings. It is to Young America that you must look for recruits to your civilian club, however, so make every effort to arrange for the boys.

There are five steps to be taken:

1. Organize the shoot.
2. Advertise it.
3. Make the range ready for a crowd.
4. Arrange for prizes.
5. Put it across.

If the club executive committee has not the time to put the job across, organize a special committee for the occasion. Get in touch with the secretaries of the various luncheon clubs in your locality, the Rotary, Kiwanis, Lions, Civitans, etc. Take it up with your newspapers, the Y. M. C. A., Chamber of Commerce, Boy Scouts and kindred organizations. Organize a National Rifle Day General Committee. Appoint from this committee sub-committees such as:

1. The Executive Committee to attend to finances, prizes, registrations, etc.

2. The Publicity Committee to prepare press notices, give talks at the business men's luncheons, arrange for placards, "dodgers," etc., and to obtain the official endorsement of the mayor and chief of police and similar well-known citizens.

3. The Program Committee to arrange the program, prepare the ranges, and to see that things ar run off smoothly on the day of the celebration.

Suggested Junior Program

The principal event of the junior program should be the Local Championship. The winner of this event is the one who will receive the coveted trip to the National Matches at Camp Perry, Ohio. The funds for this trip must be donated by the patriotic citizens of the community or by one or more of the various organizations mentioned above. Here is where the executive committee has its biggest chance to "execute."

* * *

OUR ERROR

In the bulletin covering the Intercollegiate Gallery Matches, won by the University of Pennsylvania, it was stated that the team used Springfield rifles with U. S. N. R. A. ammunition. It now appears that one man on the team used this combination, the others using Model 52 Winchesters with Precision ammunition.

WILKES-BARRE HAS BUSY SEASON

Some time ago the Wilkes-Barre, Pennsylvania Rifle Club published an open challenge through these columns for gallery matches. The results were gratifying not so much from the standpoint of a succession of victories for Wilkes-Barre, but from the angle of a number of interesting matches which followed.

The first match closed called for 20 shots prone with Lock Haven, Pennsylvania. The challengers lost this match with a score of 993 against 996 for Lock Haven. A return match was promptly arranged calling for ten shots prone and ten sitting. Wilkes-Barre won this match by the narrow margin of one point, turning in 985 against 984 for the Lock Haven crew.

Then came a match with the 212th New York Artillery Rifle Club. The Wilkes-Marre civilians mopped up on the National Guardsmen to the tune of 965 to 929. The latest of these matches to be completed was with New Brighton, Pennsylvania, with ten shots in each of the four standard positions, one position to be fired each week. New Brighton got away with a lead the first week of 449 against 430 for Wilkes-Barre, a margin of nineteen points. Kneeling was fired the second week, and the Wilkes-Barre Team with a score of 479 cut New Brighton's lead down to nine points, when the latter outfit turned in a score of 469. In the sitting position Wilkes-Barre again came out on top, 493 to 487, leaving New Brighton with a three point lead. The fourth week in the prone position New Brighton hung up a team possible while Wilkes-Barre turned up 499, so that the final outcome was New Brighton, 1905, and Wilkes-Barre, 1901, an exceptionally interesting match.

Prior to arranging the series of Interclub Matches, the Wilkes-Barre Team decided to get their members out to the weekly shoots by purchasing a large loving cup which was to be shot for under the following conditions—each match to last twelve weeks, at the end of the twelfth week the high man to get the cup, which he holds for the following twelve weeks or until it is won again. This plan continued for six matches, when the man who had his name on the cup the most times kept it permanently. The plan of shooting the four standard positions, one position each week, was adopted.

After the close of the first match, the event was changed to a handicap basis, using the score made during the first twelve weeks as the foundation for the handicap. This plan worked out very nicely and resulted in the development of a class of shooters who subsequently gave such a good account of themselves in the Interclub events.

Wilkes-Barre is now looking for outdoor matches at from 50 to 100 yards. They will be glad to arrange events with other clubs. Address Mr. Harry Frohm, Secretary Wilkes-Barre Rifle Club, 248 Lincoln Street, Wilkes-Barre, Pa.

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INTERSTATE MATCH AT FORT MISSOULA

It is to be hoped that riflemen in the states of Montana, Idaho, and Washington, who can possibly arrange to do so, will attend the Second Annual Northwestern Rifle Tournament which will be fired over the Fort Missoula ranges on Saturday and Sunday, May 16th and 17th. The Fort Missoula Club has gotten together a very attractive program with a nice array of cups, medals, and cash prizes. Sleeping accommodations, beds, and bedding, will be furnished free of charge to contestants and meals will be supplied at the rate of 50 cents per day per man. The program of the meeting has been mailed to the club secretaries throughout the states mentioned and individuals who are interested can obtain additional copies from the secretary of the Fort Missoula Club, Ft. Missoula, Montana.

These regional shoulder-to-shoulder meetings furnish an opportunity for riflemen to try their hand at something more than purely local competitions, and with the attractive prize list and splendid conditions offered there seems to be no good reason why the Fort Missoula Matches should not become a little Camp Perry.

* * *

POPE MATCHES AT ROOSEVELT RIFLE CLUB—May 30, 1925

These matches consist of an individual small bore in the morning, shot at 50, 100, and 200 yards, ten shots at each range, and a Palma Match in the afternoon shot at 150, 175, and 200 yards. They will be conducted by the Roosevelt Rifle Club, at their outdoor range at Elmsford near Tarrytown or White Plains. They are open to anybody.

How to get there. Take train to either Tarrytown or White Plains. Then take trolly to Elmsford, which lies directly between the two places. The trolly passes the property of Scott Brothers, Nurserymen, and the range is on their property, directly behind the greenhouses, and perhaps two hundred yards from the trolly line. No walking is required.

Accommodations. There will be two ranges, so that if a man gets there late he will miss nothing, although it is preferable to get there in good time and shoot along with the rest. Shooting will begin at 10:00 A. M. and continue until dark if required. There will be a house so that if rain occurs a man need not get wet. It is possible to obtain lunch at Elmsford, about a quarter mile away, easly walking.

The Pope Small Bore. 10:00 A. M. Course, 50, 100, and 200 yards; ten shots at each range Rifle, any .22 rim fire. Sights, any. Position, prone. Prizes, De Luxe gold, silver, and bronze medals for first three places; bronze medals for first and second tyro places. Entrance fee, $2.00.

The Pope Palma. 2:00 P. M. Course, 150, 175, and 200 yards; fifteen shots at each range. Rifle, any .22 rim fire. Sights, any. Position, prone. Prizes, De Luxe gold, silver, and bronze medals for first three places; bronze medals for first and second tyro places. Entrance fee, $2.50.

NOTE.—The Roosevelt Luck Medal will be given out. This will be an annual institution, and the name of the winner will be decided by drawing scores from a hat.

There are two ranges, the big range up to 200 yards, or more, and the small range at 50 and 100 yards. Those who get there late can shoot the Pope small bore in the afternoon by shooting the 50 and 100 yard course on the small range, which is right beside the large range. So being late will not bar a man from shooting both matches.

About forty men so far, have said that they will attend, and these matches will be an annual thing.

UNIVERSITY OF WASHINGTON HAS GREAT YEAR

I have watched with great interest in recent issues of THE AMERICAN RIFLEMAN, reports of small bore matches during the present season. We always like to compare the published results of matches with what we have done in similar matches, and also, what we might have done! We have here at the University of Washington a Men's team and a Girl's team, who have completed what we consider an unusually successful season, and I therefore wish to give you a brief report of the matches fired:

U. of Wash. Men's Team vs.	Score	UofW Score
7th U. S. Inf., standing and prone	900	947
Virginia Poly., 4 positions	1912	1904
California University, 4 positions	1838	1916
Seattle Rifle Club, standing and prone shoulder to shoulder at 75 feet	883	928
Snohomish Rifle Club, 20 shots standing shoulder to shoulder	879	883
Norwich University, standing and prone	952	977
Johns Hopkins U., 4 positions	1851	1927
Wash. State College, stand. and prone	819	955
Columbia University, stand and prone	958	982
Colgate U., prone, score not reported.	...	500
Kentucky University, 4 positions, 10 men, score not reported to date	.....	3883

U. of Wash. Girls Team vs.	Score	UofW Score
Nevada, prone	493	496
Washington State College, prone	464	493
Nebraska, standing and prone	769	920
Utah, prone	439	496
Maryland, prone	498	496
Montana, prone	446	492
Oregon, prone	473	495
Kansas, prone	487	500
Cornell University, prone	477	500

These matches were fired with Model 52 Winchester rifles and iron sights, on 50 foot N. R. A. targets. Each team went through the season with only one defeat, which we feel is reasonably good, considering the fact that the majority of the members of both teams were firing their first season.

As a finale to the shooting season, we staged a shoulder-to-shoulder match between the Men's and Girl's Varsity teams—ten shots prone at 50 feet, any sights. Ten men and eight girls fired in the match which was won by the Men's team, —500 and five possibles to 500 and one possible for the girls. About half of each team used scopes in this match.

Rifle shooting is a minor sport at the University of Washington, and it may be of interest to you to know that 169 men turned out for the Varsity Team last fall. This is splendid evidence of the popularity of small bore shooting in a University where the sport has been given a reasonable chance to thrive.

* * *

DAYTON DEFEATS LAKEWOOD

If there is any club in the country shooting more shoulder-to-shoulder matches than the Lakewood Club at Lakewood, Ohio, we would like to hear from them. Sometimes they win and sometimes they lose but this outfit is always looking for more competition. Their latest match was against Dayton and was fired over the Dayton range. It was a combine proposition calling for teams of five, four positions, with the rifle in the gallery, and teams of five, twenty-five shots per man at twenty yards, with the pistol. Dayton won both halves but Lakewood forwarded the results just the same. Dayton turned in a team total of 1918 with the rifle against 1877 for Lakewood, while their total of 1070 with the pistol was 22 points ahead of the Lakewood pistol score.

SUMMIT RIFLE AND PISTOL CLUB HOSTS

In their remodeled and enlarged rifle range and club rooms the Summit Rifle and Pistol Club were the hosts to a large party of friends and members of the Club and of the Cresson Division Athletic Club of the Pennsylvania Railroad. Mr. Paul Neff, general chairman of athletics of the Eastern Grand Division and the Middle Division Rifle Team of Altoona was the guest of honor.

Following the dinner various members of the girls' duckpin championship of the Eastern Region were presented with their gold medals, and the winners of the girls' singles and doubles teams championship of the Eastern Region were also given their decorations.

This was followed by the presentation of the Cresson Division loving cup to the members of the Division Rifle Team, with gold medals to each member of the team for winning the Eastern Region indoor championship of 1924. Then the Middle Division Team from Altoona was presented with the cup and medals which they had won as the outdoor championships.

The program was varied by an exhibition of sleight-of-hand, magic and parlor tricks, and closed with a dance.

The Cresson Team, as do all the Pennsylvania Railroad teams, maintains a very heavy schedule of matches, and in addition to winning the Eastern Region Championship, for which a cup was presented at this meeting, they are firing three other matches at the present time.

We hope some time to be able to persuade H. G. Olson, the leading spirit in the Cresson Club and a figure well-known to National Match shooters, to give us the story of how they make it go in Cresson and throughout the rest of the Pennsylvania System.

* * *

EASTERN MASSACHUSETTS RIFLE LEAGUE FORMED

On February 21st, representatives of seven rifle clubs met in the conference room of the Boston Y. M. C. A. and formed a league. In the past the clubs had been getting together for occasional matches, but it was the general opinion that the enthusiasm of the shooters could be kept up much better if a definite schedule of matches was arranged for the summer months.

The seven clubs of which the league is composed are: Arlington Rifle and Revolver Club, Braintree Guards Association R. C., Framingham Rifle Club, Lynn Rifle and Revolver Club, Middlesex Rifle Club (of Lincoln), Reading Rifle & Revolver Club and the U. S. M. A. A. Rifle Club (of Beverly).

It was decided to adopt the name of Eastern Massachusetts Rifle League.

Gerald R. Harvey of the Middlesex Rifle Club of Lincoln was elected president and David C. McNeill of the United Shoe Machinery Club of Beverly secretary and treasurer.

It was voted to start the matches at the last Saturday in April and have them end before the annual tournament at the Wakefield Range, in this way it will provide regular practice for the civilian riflemen prior to the Wakefield matches that usually come in August.

Some difficulty was experienced in working out a schedule for seven teams, it was finally arranged by using three ranges on each shooting date and have six teams shoot and one remain idle, by shooting on seven days every team will meet each of the other six teams once and remain idle on one shooting date.

The shooting dates will be April 25th, May 9th, May 23rd, June 6th, June 20th, July 11th, and July 25th.

The matches will be shot over the 200 yard range, as that is the only distance that most of the clubs have, teems will consist of six men, any rifle that weighs not over 10 lbs. and has at least 3 lbs. pull may be used, telescope sights not allowed, the course of fire will be 5 shots offhand and 5 shots prone with 2 shots prone for sighting.

The prizes will be 1 Gold Medal for the man with the highest average (must shoot in 75 per cent of the matches), 1 Gold Medal for the man with the highest score, 3 Silver Medals for the men with the next highest scores and 6 Bronze Medals for the next best scores.

The prize for the team winning the most matches will be a large flag.

I will send you our scores and let you know what progress we are making.

* * *

GIRLS' INDUSTRIAL SHOOTING LEAGUE CLOSES SUCCESSFUL NEW HAVEN SEASON

The girls' team representing the Seamless Rubber Company won the Championship of the Girls' Industrial Shooting League of New Haven, by winning thirteen of their fourteen scheduled matches, winning the final match against the Southern New England Telephone team by two points. The Telephone girls finished second in the League with eleven victories and three defeats. Had they won their Match with Seamless Rubber they would have accordingly tied the leaders.

The girls' team from the Geometric Tool Company were tied with the Telephone Company sharpshooters until the next to the last match of the season, when the Telephone team defeated them and forced them into a tie with Winchester, with ten victories and four defeats each. One of the girls on the Seamless Rubber team finished the season with the excellent average of 96.1. This, to the best of our knowledge, is the first time that a girls' league of this nature has been attempted, and it is one of the few city industrial leagues that have been organized.

The success of this undertaking, which was under the auspices of the Industrial Federation of New Haven, augers well for the success of the many industrial and civic organization leagues that are now being undertaken in all parts of the country.

* * *

CRESTLINE, OHIO, DEFEATS MANSFIELD IN LEAGUE MATCH

Shooting in a match of the Ohio Rifle League Crestline met Mansfield on the home range of the former team on the first. The conditions called for teams of ten or more, ten high scores to count, ten shots per man prone and ten sitting. The Crestline outfit turned in a total of 1925 against 1894 for the visitors. Fike and Arnold of the Mansfield club did all they could to help the club win, each turning in a possible in both positions, while the highest score on the Crestline team was 198, but better team work on the part of the Crestline team turned the tide in favor of their side.

WEST POINT VS. OLD GUARD RIFLE MATCH

One of the most unique rifle matches arranged for this year will take place at West Point on Saturday, May 9th, when the rifle team of the United States Military Academy meets the team of the Old Guard of the City of New York, one of America's oldest and most picturesque independent military organizations. As announced by the Army Athletic Association the course of the match will be in accordance with the match conditions of the Military Academy and similar to the course followed by the matches regularly contested between the Army Cadets and active military organizations and military colleges, including 200, 300, and 600 yards, standing, sitting, kneeling and prone.

This will be the first match of the Military Academy this year and in view of the great record of the Cadet Corps last year and number of veteran crack shots of the Old Guard it promises to be very closely contested. Although, last year, the Cadets met teams from most of the active regiments in the New York Guard and many military colleges they finished the season with a perfect slate, winning every match. The Old Guard rifle team is well known in military circles, being one of the leading veteran military rifle teams in the country, numbering among its members several riflemen who in former days were national rifle shots.

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SPRING OUTDOOR RIFLE MATCHES IN THE NORTHWEST

At Fort George Wright, Spokane Washington, May 9 and 10, 1925, there is being held by the Spokane Chamber of Commerce, and Spokane Rifle Club, the Sixth Annual Inland Empire Championship Shoot.

The shoots held at Spokane are famous for their success and this years program certainly promises diversified entertainment to satisfy the whims of the chronic shooter. Detailed information may be secured from Mr. E. K. Kiemle, 610 Riverside Avenue, Spokane.

Entries close May 4th.

At Fort Missoula, Montana, May 16 and 17, 1925, according to tentative plans, will be held the Second Annual Northwestern Rifle Tournament, under the auspices of the Fort Missoula Rifle Club and the indorsement of the National Rifle Association.

The present program outlines several good events as well as small bore, pistol, revolver, and shotgun matches. Cash prizes and trophies will be awarded for first, second, and third places.

Detailed information may be secured from Capt. W. S. Wood, 4th Infantry, U. S. A., Fort Missoula, Montana.

At Fort George Wright, Spokane, Washington, May 31, 1925, will be held the Washington State Rifle Association's Annual Conference, Election and Competition.

Detailed information on this event will be issued in the form of a separate bulletin by this office, but commence to stow away the shekels for this trip. Remember the shoot at Camp Lewis, August 3, 1925.

Snohomish County Match, an annual event, to be held some time this spring. No definite information is on hand.

Official Bulletins — 1924-25 Gallery Matches

National Rifle Association of America

CIVILIAN INTERCLUB CHAMPIONSHIP AT 50 FEET, MATCH NO. 16

No.	Name	Address	Score	Rifle	Ammunition
1.	National Capital R. C.,	Wash. D. C.	2939	See accompanying article	
2.	Ashland R.C.,	Ashland, Ohio	2935	Winchester 52	U.S.N.R.A.
3.	Akron R. C.,	Akron, Ohio	2932	Winchester 52	Precision 75
4.	Lock Haven R. C.,	Lock Haven, Penna.	2910	Winchester 52	Precision 75
5.	Massillon R.C.,	Massillon, Ohio	2901	Winchester 52	Peters
6.	Business Men's R.C.,	Columbus, Ohio	2900	Winchester 52	U.S.N.R.A.
7.	Ames Faculty R.C.,	Ames, Iowa	2881	Winchester 52	Peters
8.	Worcester P.&R.C.,	Worcester, Mass.	2879	Winchester 52	Precision 75
9.	Tulsa R.C. No. 1,	Tulsa, Okla.	2877	Winchester 52	Palma
10.	Janesville, R.C.,	Janesville, Wis.	2859	Winchester 52	U.S.N.R.A.
11.	Whiting R.C. No. 1,	Whiting, Iowa	2846	No record	No record
12.	Livermore R.C.,	Livermore, Colo.	2846	Winchester 52	Palma
13.	Vancouver R.C.,	Vancouver, Wash.	2835	Winchester 52	U.S.N.R.A.
14.	Mansfield R.C.,	Mansfield, Ohio	2821	Winchester 52	Palma
15.	New Britain R.C. No. 1,	N. Br., Con.	2811	Winchester 52	Precision 75
16.	Nashville R.C.,	Nashville, Ten.	2811	Winchester 52	U.S.N.R.A.
17.	Ferndale R.C.,	Ferndale, Mich.	2799	Winchester 52	U.S.N.R.A.
18.	Johnstown R.C.,	Johnstown, Penna.	2791	No record	No record
19.	Anchorage R.C.,	Anchorage, Alaska	2775	Savage	U.S.N.R.A.
20.	Whiting R.C. No. 2,	Whiting, Iowa	2771	No record	No record
21.	Tulsa R.C. No. 2,	Tulsa, Okla.	2729	Winchester 52	Palma
22.	Walden R.C.,	Walden, Colo.	2706	Stevens	Western
23.	New Britain R.C. No. 2,	N. Br. Con.	2681	Springfield	Palma
24.	Canon City R.C.,	Canon City, Colo.	2656	Savage	Palma
25.	Bayonne R.C.,	Bayonne, N. J.	2654	Winchester 52	U.S.N.R.A.
26.	Corbin-Russwin R.C.,	N. Br., Con.	2640	Savage	Palma
27.	Superior R.C.,	Calumet, Mich.	2638	Winchester 52	Palma
28.	Dividend R.C.,	Dividend, Utah	2548	Winchester 52	Precision 75
29.	Dividend R.C. No. 2,	Dividend, Utah	2380	Musket	Win. short

Not Completed

New Britain R. C. No. 3, N. Brit. Conn. Delaware & Hud. Police R. C. Albany.

Not Reported

Massanutten Acad. R. C., W'dst'k, Va. Nat. Cap. R. C. No. 2 Wash., D.C.
Rifle Club of Idaho Falls, Idaho Falls, Idaho

MATCH NO. 23—MILITARY COMPANY CHAMPIONSHIP

No.	Organization	Address	Score	Rifle	Ammunition
1.	Co. G 11th Inf. Ft. Benj. Harrison In.		3394	Springfield	U.S.N.R.A.
2.	Co. H 160th Inf. Cal. NG.	Pasadena	3391	Springfield	Palma
3.	Co. E 121st Eng.DC NG,	Wash. D.C.	3382	Springfield	U.S.N.R.A.
4.	Service Co. 160th Inf.,	Los Angeles, Cal.	3363	Springfield	Palma
5.	Troop A 113th Cav.,	Iowa City, Iowa	3352	Springfield	U.S.N.R.A.
6.	Hq. Co. 2 Bn 168 Inf,	Audubon, I.	3348	Winchester 52	Palma
7.	Co. F 7th Inf.	Chilkoot Ba'ks, Alaska	3339	Winchester 52	Peters
8.	Co. K 17th Inf. Ft.	Omaha, Neb.	3338	Springfield	U.S.N.R.A.
9.	Co. E 4th Inf. Ft. Geo.	Wright, Wash.	3333	No record	No record
10.	Co. B 17th Inf. Ft.	Crook, Neb.	3332	Springfield	U.S.N.R.A.
11.	Troop B 105th Cav	Milwaukee, Wis	3288	Springfield	U.S.N.R.A.
12.	Co. F 11th Inf. Ft. Benj.	Harrison In.	3283	Springfield	U.S.N.R.A.
13.	Co. B 11th Inf. Ft. Benj.	Harrison, In.	3282	Springfield	U.S.N.R.A.
14.	Co. K 11th Inf. Ft. Benj.	Harrison, In.	3279	Springfield	Palma
15.	Co. A 17th Inf. Ft.	Crook, Neb.	3259	Springfield	Winchester
16.	Troop A 113th Cav.,	Iowa City, Iowa	3255	Springfield	U.S.N.R.A.
17.	Co. F 174th Inf.	Buffalo, N. Y.	3255	Winchester 52	Precision 75
18.	Co. C 17th Inf. Ft.	Crook, Neb.	3244	Springfield	Winchester
19.	Hqtrs. Co. Dist. of	Wash., D. C.	3239	Springfield	No record
20.	Troop C 105th Cav.	Milwaukee, Wis.	3238	Springfield	U.S.N.R.A.
21.	Co. L 17th Inf. Ft.	Omaha, Neb.	3229	Springfield	Winchester
22.	Troop A 105th Cav.	Milwaukee, Wis.	3228	Springfield	U.S.N.R.A.
23.	Co. E 11th Inf. Ft. Benj.	Harrison In.	3193	Springfield	Palma
24.	Hq. & Service Co. 121st Eng. D. C.	NG	3193	Springfield	U.S.N.R.A.
25.	Co. I 11th In. Ft. Benj.	Harrison, Ind.	3191	Springfield	U.S.N.R.A.
26.	Co. G 17th Inf. Ft.	Omaha, Neb.	3186	Springfield	Winchester
27.	Co. E 17th Inf. Ft.	Omaha, Neb.	3184	Springfield	Winchester
28.	Co. I 17th Inf. Ft.	Omaha, Neb.	3175	Springfield	Winchester
29.	Co. L 11th Inf. Ft. Ben.	Harrison, Ind.	3150	Springfield	Palma
30.	Co. F 17th Inf. Ft.	Omaha, Neb.	3120	Springfield	Winchester
31.	Co L 160th Inf.	Los Angeles, Cal.	3089	No record	No record
32.	Hq.Det. 1st Sq. 105th Cav.	Milwaukee	3030	Springfield	U.S.N.R.A.
33.	Co. D 121st Eng. D. C.	NG	2961	Springfield	U.S.N.R.A.
34.	Co. B 160th Inf.	Los Angeles, Cal.	2506	Springfield	Palma

Not Completed

Hqtrs. Co. 160 Inf. Cal.NG Los Angeles Co. C 160th Inf. Cal. NG, Los Angeles
Howitzer Co. 160 Inf CalNG Los Ang Co. E 160th Inf. Cal.NG, Los Angeles

Not Reported

Hq. Det. 2nd Sq. 150th Cav. Milkaukee Hq.&Mil. Pol Co., 1st Div. C. Dix, NJ
Troop E 2nd Cav. Fort Riley, Kan. Service Co. 166th Inf. O.NG, Columbus

MATCH NO. 29—RAPID FIRE PISTOL MATCH

No.	Name	Address	Score	Pistol	Ammunition
1.	H. C. Williams,	Pasadena, Cal.	549	Colt Auto	Palma
2.	Milton L. Robinson,	Los Angeles, Cal.	524	Colt Auto	Palma
3.	J. L. Bastey,	Boston, Mass.	519	Colt Auto	U.S.N.R.A.
4.	T. K. Lee,	Birmingham, Ala.	499	Colt Auto	Peters
5.	S. E. Worley,	Pasadena, Calif.	497	Colt Auto	Palma
6.	Richard Wilzewski,	Monterey, Calif.	483	Colt Auto	U.S.N.R.A.
7.	C. G. Harrell,	Chicago, Ill.	481	Colt Auto	Precision 200
8.	A. E. Hart,	Cleveland, Ohio	475	Colt Auto	U.S.N.R.A.
9.	A. E. Hertzler,	Halstead, Kansas	471	Colt Auto	U.S.N.R.A.
10.	Jim Darlow,	Halstead Kan.	447	Colt Auto	U.S.N.R.A.
11.	Chas. R. Burdette,	Baltimore, Md.	437	Colt Auto	Palma
12.	William W. John,	Cristobal, Canal Zone	419	Colt Auto	Palma
13.	Harry E. Brill,	Tulsa, Okla.	411	Colt Auto	Palma
14.	H. R. Brunton,	Malden, Mass.	402	Colt Auto	U.S.N.R.A.
15.	C. F. Wilson,	Ft. Winfield Scott, Cal.	394	Colt .45	Winchester
16.	C. E. Stodter	Marfa, Texas	367	Reising	U.S.N.R.A.

Not Reported

Harry E. Boughton, Cleveland, Ohio R.R. Haines, East Akron, Ohio
Roger M. Kelley, Pasadena, Calif. Bernard Masko, Albany, N. Y.
Harry S. Menkel, New York City F. W. Parker, Jr., Chicago Ill.

GALLERY PISTOL CHAMPIONSHIP, MATCH NO. 30

No.	Name	Address	Score	Rifle	Ammunition
1.	H. C. Williams,	Pasadena, Cal.	553	Colt Auto	Palma
2.	M. L. Robinson,	Los Angeles, Cal.	550	S. & W.	Palma
3.	S. E. Worley,	Pasadena, Cal.	550	Colt Auto	Palma
4.	Otto B. Abel,	Oneonta, New York	542	Colt Auto	U.S.N.R.A.
5.	T. K. Lee,	Birmingham, Ala.	538	S. & W.	Peters
6.	J. L. Bastey,	Boston, Mass.	517	Colt Auto	U.S.N.R.A.
7.	C. G. Harrell,	Chicago, Ill.	517	Colt Auto	Precision 200
8.	A. E. Hart,	Cleveland, Ohio	512	Colt Auto	U.S.N.R.A.
9.	C. R. Burdette,	Baltimore, Md.	505	S. & W.	U.S.N.R.A.
10.	R. Wilzewski,	Pres. of Monterey, Cal.	501	S. & W.	U.S.N.R.A.
11.	Jim Barlow,	Halstead, Kans.	489	Colt Auto	U.S.N.R.A.
12.	B. B. Bulawa,	Chicago, Kans.	481	Colt Auto	U.S.N.R.A.
13.	A. E. Hertzler,	Halstead, Kans.	478	Colt Auto	U.S.N.R.A.
14.	Eric Johnson,	Cleveland, Ohio	471	S. & W.	U.S.N.R.A.
15.	William Weston,	New York City,	456	Colt Auto	U.S.N.R.A.
16.	Harry E. Brill,	Tulsa, Okla.	448	Colt Auto	Palma
17.	William W. John,	Cristobal, Canal Zone	427	S. & W.	Palma
18.	C. F. Wilson,	Ft. Winfield Scott, Cal.	415	Colt .45	Winchester
19.	Bernard Masko,	Albany, New York	391	Colt .38 O.M.	.38 Special

Not Completed

Harry S. Menkel, New York City

Not Reported

C. O. S. Mallard, Columbus, Ga. R. R. Haines, East Akron, Ohio
C. E. Stodter, Marfa, Tex. F. W. Parker, Jr., Chicago, Ill.
John A. Hamilton, Albany, N. Y. Roger M. Kelley, Pasadena, Cal.
Harry E. Boughton, Cleveland, O. G. B. Barth, Ft. Bragg, N. Carolina.

MATCH NO. 28—SLOW FIRE PISTOL MATCH

No.	Name	Address	Score	Pistol	Ammunition
1.	John A. Hamilton,	Albany, N. Y.	561	Colt Auto	U.S.N.R.A.
2.	C. G. Harrell	Chicago, Ill.	556	Colt Auto	Precision 200
3.	T. K. Lee,	Birmingham, Ala.	551	S. & W.	Peters
4.	O. L. Garl,	Birmingham, Ala.	551	S. & W.	Peters
5.	H. C. Williams,	Pasadena, Calif.	550	Colt Auto	Palma
6.	J. L. Bastey,	Boston, Mass.	546	S. & W.	U.S.N.R.A.
7.	Harry S. Menkel,	New York City, N. Y.	545	S. & W.	Palma
8.	Otto B. Abel,	Oneonta N. Y.	544	Colt Auto	U.S.N.R.A.
9.	Eric Johnson,	Cleveland, Ohio	542	S. & W.	U.S.N.R.A.
10.	Lloyd O. Moore,	New Cumberland, Ohio	539	Colt Auto	Palma
11.	M. L. Robinson,	Los Angeles, Calif.	538	S. & W.	Palma
12.	S. E. Worley,	Pasadena, Calif.	528	S. & W.	Palma
13.	D. A. Schemnitz,	Cleveland, Ohio	525	S. & W.	U.S.N.R.A.
14.	A. E. Hart	Cleveland, Ohio	521	S. & W.	U.S.N.R.A.
15.	C. J. Koehler,	Saginaw, Mich.	516	S. & W.	U.S.N.R.A.
16.	Harry E. Boughton,	Cleveland, Ohio	514	S. & W.	U.S.N.R.A.
17.	Richard Wilzewski,	Monterey, Calif.	514	S. & W.	U.S.N.R.A.
18.	William Weston,	New York City, N. Y.	512	Stevens	Palma
19.	R. B. Horney,	Evansville, Ind.	509	S. & W.	U.S.N.R.A.
20.	F. E. Keyes,	Cleveland Ohio	509	S. & W.	U.S.N.R.A.
21.	R. O. Phillips,	Yonkers, N. Y.	508	S. & W.	U.S.N.R.A.
22.	H. R. Drunton,	Malden, Mass.	507	S. & W.	U.S.N.R.A.
23.	C. B. Adkins,	Brooklyn, N. Y.	504	No record	No record
24.	C. J. Perry,	Saginaw, Mich.	499	S. & W.	U.S.N.R.A.
25.	John W. Aitken,	Nekoma, N. Dak.	498	S. & W.	Palma
26.	A. E. Hertzler	Halstead, Kans.	496	S. & W.	U.S.N.R.A.
27.	Harry E. Brill,	Tulsa, Okla.	494	Colt Auto	Palma
28.	Chas. R. Burdette,	Baltimore, Md.	492	S. & W.	.38 Special
29.	H. F. Barrett,	New York City, N. Y.	489	S. & W.	Palma
30.	Wm. G. Nicholson,	Washington, D. C.	482	S. & W.	U.S.N.R.A.
31.	Jim Barlow,	Halstead, Kansas	480	S. & W.	U.S.N.R.A.
32.	J. O. Norcross,	Worcester Mass.	480	No record	No record
33.	C. E. Stodter,	Marfa, Tex.	478	S. & W.	U.S.N.R.A.
34.	William W. John,	Cristobal, Canal Zone	477	S. & W.	Palma
35.	Harry Morrell,	New Haven, Conn.	470	S. & W.	Precision 75
36.	C. F. Wilson,	Ft. Winfield Scott. Cal.	455	Colt .45	Winchester
37.	Mark E. Mollett,	Arkansas City, Kan.	389	Colt .45	Issue

Not Reported

A. J. Burkhardt, Round Top Tex. James Fox, Albany, N. Y.
Walter D. Fox, Albany, N. Y. R. R. Haines Eas Akron, Ohio
Edward R. Hull, Milton Junction, Wis. Roger M. Kelley, Pasadena, Calif.
Bernard Masko, Albany, N. Y. J. R. Mooney, Champaign, Ill.
Frank C. Payne, Los Angeles, Calif. F. W. Parker, Jr., Chicago, Ill.
S. E. Hall, Fort Omaha, Nebraska

MATCH NO. 20, NRA HIGH SCHOOL CHAMPIONSHIP, 1925.

No.	Name	Address	Score		
1.	Cental H. S. Team No. 2,	Wash., D. C.	2920	Springfield	U.S.N.R.A.
2.	Iowa City High School	Iowa City, Iowa	2915	No Record	No Record
3.	Pasadena High School,	Pasadena, Calif.	2898	Springfield	U.S.N.R.A.
4.	Lawrenceville, H.S.,	Lawrenceville, N.J.	2892	No Record	No Record
5.	Waterloo H. S.,	Waterloo, Iowa	2874	Winchester	Precision 75
6.	Modesto High School,	Modesto, Calif.	2862	Springfield	U.S.N.R.A.
7.	Central H. S. Team No. 1,	Wash. D. C.	2825	Springfield	U.S.N.R.A.
8.	Ridgewood H. S.,	Ridgewood N. J.	2757	Musket	U.S.N.R.A.
9.	Grover Cleveland H. S.,	St. Louis, Mo.	2714	Springfield	Precision 75
10.	Lewis & Clark H. S.,	Spokane, Wash.	2574	Winchester	Western
11.	Richmond Hill H. S.,	R. H., N. Y.	2412	No Record	No Record

MATCH NO. 22, THE ASTOR CUP MATCH, 1925.

No.	Name	Address	Score	Rifle	Ammunition
1.	St. Johns Military Acad.	Delafield, Wis.	2938	No Record	No Record
2.	Central H. S. Team No. 2,	Wash., D.C.	2923	Springfield	U.S.N.R.A.
3.	Iowa City H. S.,	Iowa City, Iowa	2912	No Record	No Record
4.	Waterloo High School,	Waterloo, Iowa	2860	Winchester 52	Precision 75
5.	Pasadena H. S.,	Pasadena, Calif.	2832	Winchester 52	Precision 200
6.	Central H. S. Team No. 1,	Wash., D. C.	2826	Springfield	U.S.N.R.A.
7.	Modesto H. S.,	Modesto, Calif.	2824	Springfield	U.S.N.R.A.
8.	Baltimore Poly. Institute	Baltim., Md.	2799	Winchester 52	U.S.N.R.A.
9.	Northw. M.& N. Acad.,	Walworth, Wis.	2797	Springfield	Palma
10.	Deane School,	Santa Barbara, Calif.	2775	Winchester 52	U.S.N.R.A.
11.	Ridgewood H. S.,	Ridgewood, N. J.	2741	Musket	U.S.N.R.A.
12.	Poly. Prep. C.D. School,	Brooklyn, N.Y.	2594	Winchester 52	Precision 75
13.	Massanutten Academy,	Woodstock, Va.	2360	Musket	U. S. Shorts
14.	Mt. Tamalpais M. A.,	San Rafael, Cal.	2270	No Record	No Record

MATCH NO. 33. POLICE PISTOL CHAMPIONSHIP

No.	Name	Address	Score	Pistol	Ammunition
1.	G. W. Perry,	Seattle, Wash.	529	Smith & Wesson	U.S.N.R.A.
2.	S. J. Jorgensen,	Seattle, Wash.	520	Smith & Wesson	U.S.N.R.A.
3.	M. C. Short,	Seattle, Wash.	515	Smith & Wesson	U.S.N.R.A.
4.	E. J. Dell,	Seattle, Wash.	510	Smith & Wesson	U.S.N.R.A.
5.	Otto B. Abel,	Oneonta, N. Y.	509	Colt Auto	U.S.N.R.A.
6.	P. P. Vike,	Seattle, Wash.	504	Smith & Wesson	U.S.N.R.A.
7.	Harry F. Butts,	New York City, N. Y.	498	Smith & Wesson	U.S.N.R.A.
8.	Dan Twohig,	Seattle, Wash.	495	Colt Auto	U.S.N.R.A.
9.	J. K. Jensen,	Albany, N. Y.	487	Colt Auto	U.S.N.R.A.
10.	John A. Hamilton,	Albany, N. Y.	485	Colt Auto	U.S.N.R.A.
11.	John J. Fenton,	Seattle, Wash.	484	Colt Auto	U.S.N.R.A.
12.	L. M. Morris,	Seattle, Wash.	483	Smith & Wesson	U.S.N.R.A.
13.	E. A. Dunn,	Seattle, Wash.	479	Colt Auto	U.S.N.R.A.
14.	E. F. Richardson,	Albany, N. Y.	465	Colt Auto	U.S.N.R.A.
15.	Ralph M. Perkins,	Albany, N. Y.	423	Colt Auto	U.S.N.R.A.
16.	Orville H. Phay,	Denver, Col.	423	No record	No record
17.	Bernard R. Masko,	Albany, N. Y.	420	Colt .38	.38 Special
18.	William C. Murphy,	Albany, N. Y.	400	Colt .38	Western
19.	Nathan R. Hentz,	Albany, N. Y.	387	Colt Auto	U.S.N.R.A.
20.	Louis E. Kellogg,	Albany, N. Y.	381	Colt .38	Western
21.	R. A. Donovan,	Albany, N. Y.	344	No record	No record
22.	Ellis V. Brown,	Albany, N. Y.	342	Colt Auto	U.S.N.R.A.
23.	John J. Masko,	Albany, N. Y.	340	No record	No record
24.	Albert H. Heath,	Albany, N. Y.	334	Colt Auto	U.S.N.R.A.
25.	S. N. Pierson,	Albany, N. Y.	330	Colt .38	Western
26.	Charles E. Hall,	Albany, N. Y.	314	Smith & Wesson	U.S.N.R.A.
27.	H. W. Hooghkerk,	Albany, N. Y.	311	Smith & Wesson	U.S.N.R.A.
28.	James R. Carey,	Albany, N. Y.	299	No record	No record
29.	H. H. Goodrich,	Albany, N. Y.	268	Colt Auto	U.S.N.R.A.
30.	George E. Berry,	Albany, N. Y.	199	Colt .38	Western
31.	Clarence H. Kell,	Albany, N. Y.	191	Colt .38	Western
32.	Harry E. Lewis,	Albany, N. Y.	183	Colt Auto	U.S.N.R.A.
33.	Henry Levy,	Albany, N. Y.	161	Colt Auto	U.S.N.R.A.
34.	L. W. Johnson,	Albany, N. Y.	161	Colt .38	Western

RESULTS OF POLICE PISTOL TEAM MATCH (SPECIAL CHAMPIONSHIP)

	Score
1st Place—Seattle Washington Police Team, five silver medals	2578
2nd place—D. & H. Police System, Albany, N. Y., five bronze medals	2369

MATCH NO. 27—RAPID FIRE TYRO PISTOL MATCH

No.	Name	Address	Score	Pistol	Ammunition
1.	M. L. Robinson,	Los Angeles, Cal.	521	Colt .22	Palma
2.	S. E. Worley,	Pasadena, Cal.	504	Colt .22	Palma
3.	Richard Wilsekski	Monterey, Calif.	500	Colt .22	U.S.N.R.A.
4.	C. G. Harrell,	Chicago, Ill.	490	Colt .22	Precision 200
5.	R. R. Haines,	East Akron, Ohio	425	Colt .22	Palma
6.	I. G. McQueen,	Moulton, Iowa	414	Colt .22	U.M.C.
7.	C. J. Koehler,	Saginaw, Mich.	402	Colt .22	U.S.N.R.A.
8.	J. P. Robbin,	Saginaw, Mich.	397	Colt .22	U.S.N.R.A.
9.	C. O. S. Mallard,	Columbus Ga.	355	Colt .22	U.S.N.R.A.
10.	C. F. Wilson,	Ft. Winfield Scott, Cal.	354	Colt .45	Western
11.	C. J. Perry,	Saginaw, Mich.	296	Colt .22	U.S.N.R.A.

Not Reported

W. S. Bibbons, Boston, Mass. Wm. C. Luebbert, Chicago, Ill.
Maurice D. Wilt, Philadelphia, Penna. G. B. Barth Ft. Bragg, N. Car.

MATCH NO. 26—SLOW FIRE TYRO PISTOL MATCH

No.	Name	Address	Score	Pistol	Ammunition
1.	C. G. Harrell,	Chicago, Ill.	563	Colt Auto	Remington
2.	F. E. Keyes,	Cleveland, Ohio.	557	S. & W.	U.S.N.R.A.
3.	Eric Johnson,	Cleveland, Ohio	544	S. & W.	U.S.N.R.A.
4.	Milton L. Robinson,	Los Angeles, Cal.	528	S. & W.	Palma
5.	D. A. Schemnitz,	Cleveland, Ohio.	521	S. & W.	U.S.N.R.A.
6.	Lester H. Greene,	Forestville Conn.	520	Colt Auto	Palma
7.	Lloyd O. Moore,	New Cumberland, Ohio	519	Colt Auto	Palma
8.	Edward Seigle,	Astoria, L. I., N. Y.	516	Stevens	Palma
9.	Richard O. Phillips,	Yonkers, N. Y.	513	S. & W.	U.S.N.R.A.
10.	W. R. Amos,	Lakewood, Ohio.	512	S. & W.	U.S.N.R.A.
11.	C. B. Adkins,	Brooklyn N. Y.	505	No record	No record
12.	S. E. Worley,	Pasadena, Cal.	505	S. & W.	Palma
13.	Richard Wilzewski,	Monterey, Cal.	504	S. & W.	U.S.N.R.A.
14.	W. S. Gibbons,	Boston, Mass.	501	No record	No record
15.	I. G. McQueen,	Moulton, Iowa.	500	S. & W.	Peters
16.	C. O. S. Mallard,	Columbus, Ga.	499	Colt Auto	U.S.N.R.A.
17.	Chester A. Moore	Somerville, Mass.	498	S. & W.	U.S.N.R.A.
18.	J. O. Norcross,	Worcester, Mass.	493	S. & W.	U.S.N.R.A.
19.	W. A. Schwarz,	Vancouver, Wash.	491	S. & W.	U.S.N.R.A.
20.	John W. Aitken,	Nekoma, N. D.	491	S. & W.	Palma
21.	Bernard B. Bulawa,	Chicago, Ill.	491	Colt Auto	U.S.N.R.A.
22.	Burleigh Putnam,	Pasadena, Cal.	478	Hopkins	U.S.N.R.A.
23.	C. J. Koehler,	Saginaw Mich.	477	Colt Auto	U.S.N.R.A.
24.	William Weston,	New York City, N. Y.	473	Stevens	Palma
25.	C. J. Perry,	Saginaw, Mich.	469	S. & W.	U.S.N.R.A.
26.	G. B. Barth,	Ft. Bragg, N. C.	467	Colt Auto	U.M.C.
27.	Chas. F. Wilson,	Ft. Win. Scott, Calif	467	Colt .45	N.M. 1924
28.	A. M. Reynolds,	Schenectady, N.Y.	447	Stevens	Winchester
29.	Wm. C. Luebbert	Chicago, Ill.	434	S. & W.	U.S.N.R.A.
30.	Wm. H. Boynton,	Berkeley, Cal.	431	Stevens	U.S.N.R.A.
31.	Maurice D. Wilt,	Philadelphia, Pa.	412	Colt Auto	U.S.N.R.A.
32.	Earl Moye,	Saginaw, Mich.	493	S. & W.	U.S.N.R.A.
33.	J. P. Robbins,	Saginaw, Mich	378	S. & W.	U.S.N.R.A.
34.	Mark E. Mollett,	Arkansas City, Kan.	357	Colt .45	Issue

MATCH NO. 31—FREE PISTOL MATCH

No.	Name	Address	Score	Pistol	Ammunition
1.	T. K. Lee	Birmingham, Alabama	368	S. & W.	Peters
2.	Sidney R. Hinds,	Sioux Falls, S. Dakota	367	Tell	U.S.N.R.A.
3.	M. L. Robinson,	Los Angeles, Calif.	366	S. & W.	Palma
4.	Otto B. Abel,	Albaney, N. Y.	363	Colt Auto	U.S.N.R.A.
5.	S. E. Worley,	Pasadena, Cal.	360	Colt Auto	Palma
6.	H. C. Williams,	Pasadena, Calif.	356	No record	No record
7.	C. B. Adkins,	Brooklyn N. Y.	350	S. & W.	No Record
8.	A. E. Hart,	Cleveland, Ohio	348	S. & W.	U.S.N.R.A.
9.	Wm. G. Nicholson,	Washington, D. C.	329	Stevens	Palma
10.	William Weston,	New York City, N. Y.	320	Swiss Free	Palma
11.	William W. John,	Cristobal, Canal Zone	309	S. & W.	Palma

Not Reported

Eric Johnson, Cleveland, Ohio Roger M. Kelley, Pasadena, Calif.
F. W. Parker, Jr., Chicago, Ill. Richard Wilzewski, Monterey, Calif.

INDIANA STATE RIFLE ASSOCIATION GALLERY COMPETITIONS

The Annual Gallery Match of the Indiana National Guard and Indiana State Rifle Association were held at the Culver Military Academy on March 30th. The program was a varied one. Match No. 1, a re-entry event at 50 ft. in the prone position was won by James W. Hurt, of Indianapolis, with a possible score which included nine X's. H. L. Dowing, of Tipton, was runner-up with eight X's. There were twelve competitors in this match, seven of whom hung up possibles.

The Re-entry Match at 50 ft. offhand only attracted eight entries. This event was also won by Hurt with a score of 96. Bradford L. Carver, of Culver, was runner-up with 92.

The Individual Championship Match at 50 ft., prone position attracted forty-one entries. There were fourteen possible scores made. Randall Wolfe of Terre Haute and Herbert C. Watson of Tipton tied with 19 X's apiece, but on consecutive shots Wolfe was given the higher rank.

The Championship Standing attracted twenty-one entries. It was won by Bradford L. Carver, of Culver, with a score of 184, outranking Elmer T. Laws of Bloomington and Randall Wolfe of Terre Haute, who turned in the same totals.

The Interclub Competition, teams of five, twenty shots per man, prone, iron sights, called out fifteen teams. Culver Military Academy mopped up in this event, winning first and second with scores of 995 and 994 respectively. Company K, 152nd Infantry, finished third with 993, and the Fort Harrison Rifle Club fourth with the same total. The civilians had a 197 in their team total, while the Guardsmen's lowest score was a 198. The teams and their scores follow:

Culver Military Academy, Team No. 2	995
Culver Military Academy, Team No. 1	994
Co. "K," 152nd Infantry	993
Fort Harrison Rifle Club	993
Company "G," 152nd Infantry	193
Hoosier Rifle Club	992
Culver Military Academy Team No. 3	987
Fort Wayne Rifle Club	985
Goldsmith Rifle Club	983
Indiana University	981
Company "L," 152nd Infantry	965
Service Company, 152nd Infantry	961
Company "I," 151st Infantry	955
Company "I," 152nd Infantry	888
Howitzer Company, 151st Infantry	642

In the pistol events Frank W. Bushman of Connersville was the leading light, capturing two events, the Re-entry Match at 50 ft. on the Standard American 20 yd. target, which he won with a score of 97, and the Service Pistol or Revolver Re-entry Match at 25 yards on the "L" target, which he won with a score of 98. In the latter event his 98 outranked similar scores made by Houck of Fort Wayne, Mueller of Terre Haute, and Kittle of Culver. The 50 ft. Individual Championship for handgun men was won by Ora. W. Rush, of Culver, with a score of 96.

The Individual Pistol Match at 25 yds., Service Pistol or Revolver, .45 caliber, "L" target, 10 shots slow fire, was won by Lieutenant Colonel Basil L. Middleton, of Culver, the moving spirit in these Annual State Matches, with a score of 98. Houk of Fort Wayne turned in 97, as did also Kittle of Culver, Wolfe of Terre Haute, and Canseco of Culver.

The civilian teams came out on top in the Pistol Match at 50 ft. This event was won by the Hoosier Rifle Club, with a score of 433, teams of five, ten shots per man, Standard American 20 yd. target.

The teams and their scores in this event follow:

Hoosier Rifle Club	433
Kosciusko Rifle Club	421
Fort Wayne Rifle Club	409
Fort Harrison Rifle Club	407
Culver Military Academy	401
Service Company, 152nd Infantry	346

* * *

SEATTLE POLICEMEN CLEAN UP GALLERY POLICE CHAMPIONSHIP

Capturing the first four places and six of the ten high places, the guardians of the law from Seattle, Washington came close to making a clean sweep of the Gallery Police Pistol Championship. G. W. Berry won the match with a score of 529, and a team-mate, S. J. Jorgensen, was runner-up with 520. Five points behind Jorgensen came M. C. Short, who is range officer for the Seattle police. Next was E. J. Dell, of the same police department, with a score of 510. Sixth place went to P. P. Vike, and eighth place to Dan Twohig, all of the same department. Twohig was the only Seattle officer who didn't shoot a Smith & Wesson gun. He used a Colt automatic. The first fifteen places in this event went to men using U. S. N. R. A. ammunition. A total of forty-eight entries in the Individual Police Match, while a most minute percentage of the total number of policemen who should be interested in shooting, nevertheless is encouraging, and indicates that actually the men who depend on a gun more than anyone else in peace time are becoming interested in its proper handling.

The Seattle Team and the D. & H. Team were the only organizations to enter enough individual shooters to be considered in the Special Championship Match. Seattle, with a score of 2578, defeated the D. & H. outfit, whose score was 2369.

Conducted by Lt.Col. G. C. Shaw

Civilians to Attend 1925 National Matches

UNDER date of April 23, 1923, the Secretary of War authorized the attendance of civilians at the Small Arms Firing School and the National Matches at Camp Perry, Ohio, August 22, 1925 to September 20, 1925, inclusive at the expense of the Federal Government under the following conditions:

COMPOSITION OF TEAMS

The Governors of the several States and the Commissioners of the District of Columbia are authorized to designate thirteen able-bodied male citizens of the United States, residents of their respective States or the District of Columbia, as a team to attend the Small Arms Firing School and participate in the National Matches, to be held at Camp Perry, Ohio, during the period August 22, to September 20, 1925, inclusive.

Each team will consist of one team captain, ten shooting members and two alternates. Any number of additional men may constitute the team squad and subsequently be eligible to shoot in the National Team Match provided they meet all eligibility requirements, but only thirteen men shall be entitled to participate at Government expense as hereinafter provided.

REIMBURSEMENT EXPENSES

Reimbursement of travel expense and commutation of subsistance allowance shall be made only to such civilians as have been regularly designated in competent orders issued by authority of the Governors of the respective States and the Commissioners of the District of Columbia.

Each of the thirteen civilian members of each team will be reimbursed for travel expenses enroute from his bona fide residence within the State he represents (the bona fide residence of each civilian must be stated in the order designating him as a team member) to Camp Perry, Ohio, and return to said residence at the rate of five cents per mile each way. The allowance for return travel to be paid in advance of performance of travel.

Each civilian member of authorized teams while in attendance at Camp Perry, Ohio, between August 30 and September 20, 1925 inclusive will be paid commutation of subsistance at the rate of $1.20 per day.

ELIGIBILITY

The ten shooting members and the two alternates shall be subject to the following elimination rules:

A team listed in class "A" after the National Matches of 1924 or after the last National Match in which such team competed shall have at least fifty per cent of its shooting members composed of men who have never before shot on any national match rifle team. A team listed in class "B" after the National Matches 1924 or after the last National Match or after the last National Match in which such team competed shall have at least thirty per cent of its shooting members composed of men who have never before shot on any national match rifle team. A team listed in class "C" or unclassified after the National Matches of 1924 or after the last National Match in which such team competed shall be subject to the following elimination rule only, to which all teams except those representing the Reserve Officers' Training Corps, the Citizens' Military Training Camps and the Organized Reserves are also subject, in addition to the rules prescribed above.

No team may have as a shooting member or alternate any man who has been a shooting member of any team in three or more of the five National Rifle Team Matches immediately preceding.

The team captain should be a man with previous National Match experience. If the team captain is also a shooting member then he must comply with the elimination rule.

Address all communications regarding participation of State Civilian Teams in these matches to the Executive Officer National Board for the Promotion of Rifle Practice, Room 1035, Temporary Building No. 5, Washington, D. C.

NO .22 LONG RIFLES FOR ISSUE

Requisitions received from many clubs ask for caliber .22 long or long rifle cartridges. It is impossible for the D. C. M. to approve requisitions for such cartridges as the only cal. .22 ammunition available for issue is the .22 short.

.303 AMMUNITION

Purchasers of ammunition for the Ross rifle are notified that the only available supply of this ammunition is stored at Benicia Arsenal, Benicia, California, from which place all future orders for this ammunition will be shipped.

1925 MATCH AMMUNITION

The National Match ammunition of 1923 and 1924 has been withdrawn from sale, the stock remaining being reserved for practice of the various teams. It is not known at the present time whether or not it will ever be sold again. However the new National Match ammunition has been tested and found to be satisfactory and is being manufactured.

National Match ammunition cal. .30, 1925 will be available for sale about May 15, 1925, to individual members of the National Rifle Association and to civilian teams representing states and territories, or orders approved by the Director of Civilian Markmanship.

Case of 1,200 rounds	$67.97
No packing charges on case lots.	
Bandoleers of 60 rounds	3.40
Packing charge for lots of less than 300 rounds	.50
Packing charge for lots of over 300 rounds and less than case lots	.75

Orders for this ammunition should be sent to the Director of Civilian Marksmanship, Room 1635, Temporary Building No. 5, Washington, D. C., accompanied by money order, express money order, certified check or draft, made payable to the Director of Civilian Marksmanship, in the proper amount.

Personal checks not accepted.

Shipment will be made by freight or express, charges collect, as requested by purchaser.

* * *

NO MORE .22'S

The supply of caliber .22 short ammunition at Frankford Arsenal is exhausted. No more orders should be sent to the D. C. M. until further notice.

* * *

.30 KRAG AMMUNITION

Everybody should remember that the available supply of cal. .30, ammunition, Model 1898 (Krag) is stored at arsenals along the Atlantic coast. Purchasers in the West should remember this when they write in about their orders. It takes the railroads some time to transport a small freight shipment across the country, so that when an order is sent in, wait about six weeks. If the shipment is not received in that time, write in making enquiry.

* * *

GIVE YOUR NUMBER

It is suggested to all desiring to order rifles, ammunition and other supplies through the office of the Director of Civlian Marksmanship that they always give the number of their N. R. A. card or better still, send in the card with their order. The card will be returned at the time the order is approved. This will help this office to forward orders to the arsenals without delay, for it will eliminate the necessity of writing to each one to find out if his dues have been paid for the current year.

* * *

SEND IN REPORT OF FIRING

Many clubs have failed to send in their report of firing (O. D. C. M. Rorm No. 2). These reports are necessary so that insignia for qualification may be issued. Qualification over any of the courses shown on the back of Form 2 entitles club members to insignia, which of course, cannot be issued unless a report is sent in showing the score made.

THE DOPE BAG

A FREE SERVICE TO TARGET, BIG GAME AND FIELD SHOTS
ALL QUESTIONS BEING ANSWERED DIRECTLY BY MAIL

Rifles and Big Game Hunting: Major Townsend Whelen Pistols and Revolvers: Major J. S. Hatcher
Shotgun and Field Shooting: Captain Charles Askins

Every care is used in collecting data for questions submitted, but no responsibility is assumed for any accidents which may occur.

The .300 Savage

By Townsend Whelen

DETAILS of good loads for the Savage Hi-Speed .300 are rather lacking among contemporary riflemen. Therefore a letter from Byron E. Cottrell of Harrison Valley, Pa., containing some first hand dope on this question is timely and worthy of comment. Here is Mr. Cottrell's contribution:

I notice two different men asking about a Hi-Speed load for the .300 Savage in the last AMERICAN RIFLEMAN. I thought you would be interested to know that I have had a little experience with these loads, using the Western Tool and Copper Works 110 grain bullet.

A friend of mine—a small man—had a .300 feather weight, and he could not do good work with it on account of the recoil. First I loaded the 150 grain bullet for him at about 2,400 f.s. Then I learned of these 110 grain bullets, and they proved to be just what he wanted. He liked a fast load. 41 Grains No. 16 gives 110 grain B. 2,800 f.s. (du Pont's figures).

At first I worked the load up to 44 grains No. 16 and this gave less pressures than the standard load. I wrote du Pont and they recommended 42.5 grain No. 16 and gave the velocity at 3,000 f.s. The primers showed the pressure to be low. As the rifle was a lever action I recommended this load. It has been my experience with the .300 Savage that it would not stand over 600 or 700 shots (in the lever action) before the frame would begin to stretch and change the groups so fast that it did not pay to bother with it.

I have loaded several hundred of the high-speed loads (42.5 grains I.M.R. No. 16 and 110 grain W.T.& C.W. bullet) and they gave good satisfaction. The recoil was much lighter, the accuracy was as good as the standard load. I loaded 50 for another man last fall to use hunting, I have not heard how he liked them, but I sighted in the rifle and it shot them fine. It was a feather weight take-down and shot these loads to the same sighting as it did the standard load. The other rifle was a feather weight solid frame and required a different adjustment of the sights. I have also tried this load in a heavy weight 26 inch barrel solid frame Savage, and they required a different sighting so he decided not to use them.

The load is O.K., and I believe it is the best load there is for the .300 (on medium sized game) on account of the low pressures, and light recoil. Those WT & CW bullets hold together fine, and it is my belief they would prove as good penetraters as the regular S. P. 150 grain.

In connection with Mr. Cottrell's remarks it may well be borne in mind that there is a big demand for these hi-speed loads with 110 grain bullets. In addition I notice very increased interest in the Western Tool and Copper Company bullets. I have tried a number of these bullets myself, and I also have had most flattering reports on them from a large number of my correspondents and friends. They are accurate and unfirmly made, and they conform to my ideas in that the jackets are very much thicker than with other bullets, and they have less exposure of lead at the point. Undoubtedly they will hold together better than any expanding bullet on the market. I have been particularly interested in the 110 grain .30 caliber bullet which you have tried, and also in the 200 grain .30 caliber bullet. The latter should be most excellent for all of our heavier game, and it can probably be given a M. V. of almost 2,500 f.s. in the Springfield or 2,300 f.s. in the Krag. I am not sure but what this bullet can also be used in the .300 Savage bolt action rifle with a velocity of almost 2,250 f.s.

I note with great interest that Mr. Cottrell says, "It has been my experience with the .300 Savage that it would not stand over 600 or 700 shots (in lever action) before the frame would begin to stretch and change the groups so fast that it did not pay to bother with it." This has been exactly my experience with all of the older type lever action rifles which have a long breech block supported by locking bolts at the rear, and which are made of steel which is soft so that it can be easily and cheaply chisled, the steel not being heat treated afterwards. We must remember that all of these actions were designed for black powder, except the Savage Model 1899 which was designed in black powder days when we had not had much experience with high pressure powders. Black powder pressures ran about 20,000 to 25,000 pounds. Some of the old Winchester Model 1886 rifles in .45-70 powder were fired an ungodly number of times, and cases of development of increased headspace in these rifles was by no means rare even when black powder was used exclusively. The adoption of these breech actions to high pressure cartridges giving pressures of from 35,000 to 50,000 pounds was a makeshift to avoid the great expense of the design and manufacture of modern breech actions for modern cartridges. Where breech pressures do not exceed 35,000 to 38,000 pounds, as in the case of the .25-35, .30-30, .303 Savage, etc., one does not run into many difficulties. These pressures will not result in increased headspace within the practical life of the barrel. That is in almost every case the barrel will be worn out from a combination of erosion and lack of perfect cleaning before the breech action wears out. But with pressures around 45,000 to 50,000, as in the case of the .300 Savage, and perhaps the .30-06 Model 95 Winchester, trouble will often be experienced at the very start from cases stretching so that they cannot be reloaded, and after 600 or 700 rounds have been fired, as you have found out, the headspace has often been increased to such an extent that an occasional separation of the case will result, and the breech actions will be found to be worn out in many other respects. Just how long such a breech action would last if the steel was properly heat treated, I do not know, but I do not think that it would be materially increased as I think that most of the trouble is in faulty, or rather obsolete design in the locking of the breech bolt in the rear. It is easy to talk about heat treating one of these breech actions, but that involves a long expensive metallurgical study in a laboratory to determine just what heat treatment should be given, and afterwards the installation of equipment to give it. It is my thought that all of these actions should not be used with cartridges giving pressures greater than about 38,000 pounds. If it is desired to use pressures greater than this a modern bolt action should be used.

Nothing in the above should be construed as indicating that these older lever actions are in any way unsafe with the factory cartridges of their size. They are not unsafe. I have seen some of them withstand unbelievably high pressures. The soft steel stretches instead of giving away. When we attempt to destroy such a breech action by very heavy experimental pressures we find that we have to get terrifically high pressures to do it, and that then most of the receivers spread their side walls out sideways so that the locking bolts do not hold. A few years ago some of our riflemen attempted to compare the strength of actions by comparing the area of the locking lugs, on the theory that the strongest action was the one which would best resist the shearing off of the locking lug. The locking lug is not the weak point in these lever actions. Rather it is the thickness of the walls of the receiver, and the lack of their resistance to strain which bends them outward.

All this, if it is read as I have intended that it should be read, is not an attack on lever action rifles in general. I think that the Savage Model 1899 action is perfectly satisfactory for the .30-30, .303 Savage, .25-35, .32-40 H. P. and .38-55 H. P. cartridges. I also think that Winchester actions are perfectly satisfactory for the same cartridges, and for .33 W.C.F., .32 Special and .30-40 cartridges. But I do not think that these same actions are quite the thing, except when very new, for cartridges giving pressures above 45,000 lbs., like the .250-3000 Savage, .300 Savage and .30-06.

PRE-WAR vs. POST-WAR

I WOULD like you to let me know how the revolvers made by the Smith & Wesson and the Colt companies at present compare with the pre-war guns.

My reason for asking is that last fall I got a new C grade Fox shotgun. I am fairly disgusted with it. First, when I put in shells there is just enough room for the forward part of the shell to slip past breech block. Then the gun must be broke some more to allow rim to pass. Second, the only other thing wrong is that the finish is rough and looks like blazes when covered with frost. It has nothing like the smooth finish that my old Sterlingworth has, but it has a very fine stock. J. W. McQ., Ontario, Can.

Answer (by Major Hatcher). The quality of the Colt and the Smith & Wesson revolvers that are being manufactured right now, is fully equal to that of pre-war production. In fact in some ways the latter guns are superior because some recent investigations in the heat treatment of steel have allowed the strengthening of the cylinders in order to lessen the risk of damage from a possible over load, and also in the case of weapons such as the .32-20, to lessen the danger which might arise from the accidental use of high velocity cartridges intended for rifle use only.

THE .38 AUTOMATIC

I AM considering buying a .38 Colt Automatic Pistol, Military Model, with the idea of using it in the N. R. A. and U. S. N. R. A. rapid fire matches, and would like to have your opinion before spending the $43.50. Can you tell me why this particular gun is not more popular? Is there anything specially undesirable about it? It seems to me that it ought to be a cracker-jack from the standpoint of velocity and energy. I bought one of these pistols in 1915, and sold it the same year because it jammed eight times in 400 shots, and on account of the very high cost of the ammunition; but since then I have learned from experience that automatic pistols which do not jam are something like two-headed calves, you hear about them but very seldom see one. So when I suspect trouble I always have the old reliable revolver near-by. However, when shooting at a paper target, or a stick floating in the river, a jam is not a serious matter.

When I owned my last automatic I wasn't a sufficiently good shot to know whether this .38 Military Model was capable of making good scores or not. Does its accuracy compare favorably with the .38 Colt Army Special revolver, 6-inch barrel? Are the sights as good? Is it as reliable as any other automatic? Would you consider the .45 Colt Automatic preferable for rapid fire target work? I should think the heavier recoil of the larger caliber would make it less suitable for this kind of shooting. As some of the scores have to be made with a military arm I must select one of these two, or else buy a foreign gun, which I don't want.

All the information that you can give me about this .38 Colt Automatic I shall appreciate, and I believe it would be interesting to other pistol shooters that read THE AMERICAN RIFLEMAN, as very little seems to be known about this particular gun. D. P. P., Baltimore, Md.

Answer (by Major Hatcher). The .38 Caliber Automatic pistol has excellent ballistics, as you state in your letter. The reason that the gun is not more popular, is because it was designed years ago when automatic pistols were first coming on the market, and afterwards the Government adopted the .45, and a great deal of time and energy was spent on perfecting the .45 caliber for Government use.

After the .45 was perfected and adopted, no further work was done on the .38, so that the gun itself is very little changed at the present time from what it was fifteen years ago.

Accordingly, the pistol itself is way out-of-date, and lacks the improvemnets found on the .45.

Owing to the popularity of the cartridge, there has been some talk recently of getting out a remodeled .38 Military, but whether or not this will ever materialize, I do not know.

The .38 Military is an accurate gun, but the cartridge has not had the attention as to development that the .45 has. Therefore, it would be much better, it seems to me, to purchase the .45 caliber Government model. For example, the efforts of Frankford Arsenal in making the .45 caliber National Match Ammunition, have resulted in a considerable improvement in the .45 caliber cartridge, so that it is probably more accurate than most other pistol cartridges today.

A test made at Frankford Arsenal the day before your letter was written, consisting of five targets of ten shots each, showed an average mean radius of .65-inch at fifty yards; the extreme vertical spread of the group being 1.82-inch, and the extreme horizontal spread being 1.69-inch.

TURNING DOWN THE SPRINGFIELD

HOW much can the regulation Springfield rifle barrel be turned down for a sporting rifle without affecting its shooting qualities? All sporting Springfields I have seen are not well balanced, the barrel appearing to be too heavy for the stock. Can you tell me where I could get a barrel turned down and finished properly?

Can you give me the names of firms selling selected figured walnut for gun stocks? I note in THE AMERICAN RIFLEMAN where one man makes gun stocks of Koa Wood. I have never seen this wood. Will you advise me which is the more attractive, walnut or Koa Wood, as a gun stock wood? A. A. C., Parris Island, S. C.

Answer (by Major Whelen). The regulation Springfield barrel cannot be turned down at all without hurting its shooting qualities. The lighter or thinner the barrel is, other things being equal, the larger will be the groups it will shoot. Moreover, turning the barrel down very often sets up or relieves strains in the steel, so that thereafter the barrel is no longer straight. It is also possible to turn the barrel down to the point where it is no longer safe.

The most accurate type of Springfield rifle is that known as the Sporting .30 caliber type, with barrel polished and blued from receiver to muzzle, without rear sight fixed base, with Lyman No. 48 rear sight, barrel star gauged, trigger adjusted, all working part smoothed up, sporting type of Model 1922 pistol grip stock with short forearm. Over ninety-five per cent of these rifles, when tested, group their shots inside of a 2-inch circle at the standard testing range at 238 yards. This is with National Match ammunition. The fine accuracy seems to be due in no small measure to the way in which the barrel is bedded closely into the short forearm, and the way in which the encircling barrel band binds the barrel to the forearm. At least, when these features are disturbed, then the rifle seems to give about 2-inch groups at 100 yards, or 4-inch groups at 200 yards. This, also, is about the kind of accuracy one gets from the best Springfield rifles remodelled into sporting arms by our best gunmakers.

If one wants to lighten the Springfield forward, I think that perhaps the best method is to cut the barrel off to 22 or even 20 inches in length. Unfortunately the regular service rifle, when the rear sight fixed base is removed, is rather rough towards the breech, and if then made into sporting model a certain amount of turning down is necessary to give the weapon a good appearance. I fear that quite often the accuracy is injured a little thereby.

The best places to get the Springfield barrels turned down, polished, and reblued, are:

Griffin & Howe, Inc., New York, N. Y.; Hoffman Arms Co., Cleveland, Ohio; Niedner Rifle Corporation, Dowagiac, Michigan.

The best American walnut obtainable for gunstocks is at present being suppled to individuals by R. D. Tait, Montague, California. It is practically impossible to buy imported walnut, or Circassian walnut stock blanks in this country. The only firms having any find it so difficult to import it, and have special agents abroad looking it up, that they reserve all they can get for their own use and will not sell to individuals. These blanks are now costing them about $15.00 apiece. Tate can probably let you have a very good American walnut blank, roughly machined out for Springfield sporting stock if you so wish, for about $6.00. I have never seen Koa Wood, so cannot compare it with walnut. I believe that it comes from Honolulu. My impression is that there has never been a wood that equals Circassian walnut.

SHORTENING THE BARREL

HAVING read Mr. Johnson's article "The Peculiar .22" in the March 1st issue of THE AMERICAN RIFLEMAN, I should like your opinion as to the result I will secure by cutting my Winchester 52 to an 18-inch barrel length, reshape the fore-end to a more sporting type, slot the barrel for a globe front sight, and removing the standard receiver sight fit a Lyman 2A, screwing the base to the wood on top of the grip, clearing the backward throw of the bolt.

Possibly it may be necessary to file off some metal from the receiver just above where the barrel screws in and from the bridge making a flat surface at each point thus securing a sight plan much closer to the bore. As my rifle is the old model, believe by lowering the sight plane the stock will fit better and if necessary I can graft in a piece of wood and reshape the comb.

As I now have not much use for a strictly target rifle and desire one mostly for impromptu target, squirrel and vermin shooting, to a great extent offhand work, I believe this sort of combination may suit me better than what I now have as I would retain all the most desirable features of the Model 52 and have a gun less than a yard long which would make it convenient to take along in the car.

A few years ago I shot to quite an extent a muzzle loader with a very heavy barrel about 16 inches long which held better in the offhand position, due to its short length and plenty of weight than any rifle I have since come in touch with.

Have had some experience in restocking and refinishing and believe I can do all this work except having a good workman finish off the muzzle and patch up the blueing for me. V. L. Y., Corvallis, Oregon.

Answer (by Major Whelen). I think that shortening the barrel of any rifle to 18 inches is going a little too far. It makes too short a sight radius for accurate aim, and makes the rifle awkward looking, and perhaps difficult to handle, that is aim accurately. I would advise that the Winchester Model 52 be not shortened to less than 22 inches. I have always thought that the barrel of this rifle was a little too long. To improve appearance and lighten the rifle up I would also suggest that the forearm be shortened so as to project not more than nine inches beyond the receiver.

You say you want your rifle most for hunting. The globe front sight would be almost useless for hunting. Also I doubt if you will get satisfactory results from Lyman No. 2 sight screwed to the wood of the grip. There will be constant variation, it will interfere with the operation of the rifle in rapid fire, and the sight has not the necessarily fine adjustments to allow of your keeping the rifle correctly sighted at all times. Would rather advise your using a Lyman gold tipped front sight with a .07-inch square gold bead, which you can leave bright for hunting or blacken with the smoke of a match for target shooting. Also a Lyman No. 48 receiver sight which any good machinist can fit to the left side of the receiver for you, removing the present rear sight and filling the large slot from which it came with a piece of blued metal.

RELOADING

I HAVE sent to the Western Tool and Copper Works for some 110-grain .30-06 and 60-grain .250-3000 bullets. Please advise load of No. 16 powder for the above. Do you think that I can get 3,500 f.s. with 110-grain bullet with this powder. W. D. J., Roslyn, Washington.

Answer (by Major Whelen). The proper charge of No. 16 powder for use with the 110-grain Western Tool and Copper Works bullet is 53 grains weight. This should give a muzzle velocity of between 3,350 and 3,400 f.s. This for the .30-06 rifle and cartridge. The best charge is that used by Remington with their 110-grain Hi-speed bullet, consisting of 56 grains weight of duPont No. 17½ powder, giving a muzzle velocity of 3500 f. s.

The proper charge for the .250-3000 Savage cartridge using the 60-grain Western Tool and Copper Works bullet is 39 grains of du Pont No. 16 powder giving a muzzle velocity of about 3,300 f.s., and 41 grains of du Pont No. 17½ powder giving a velocity of about 3,400 f.s. These charges are safe only in bolt action rifles. For use in lever action rifles these weights of powder should be reduced about 5 grains. I know nothing of the accuracy of this load as I have never tried it, nor know of anyone who has.

THE .35 AUTOMATIC

YOU surely are doing a fine work for the shooters of the country in answering their various questions and I am going to take advantage of your generosity in giving advice and ask a question now and then. Here goes No. 1. What is your honest opinion of the Remington 35 automatic for such game as moose and large bear? No. 2. What seems to be the favorite gun among hunters of this game? E. A. F., Silver Lake, Ind.

Answer (by Major Whelen). The .35 caliber Remington autoloading rifle is a satisfactory weapon for moose and large bear. It has been tried on both moose and large bear so many times that there is not the slightest doubt about this. If you prefer this rifle to other types there is not the slightest reason why you should not use it, and why you should not expect to obtain satisfactory results. This rifle has ample power, and accuracy for use on such game up to 200 yards and is reliable.

The favorite rifle for use on such game is the Sporting Springfield or the Remington model 30 shooting the Remington make of .30-06 "Express Mushroom" cartridge with 220-grain bullet. Either of these rifles, with this cartridge have more power, greater accuracy, flatter trajectory, and are stronger and more rugged in their construction than the Remington autoloading rifle, which, however, should not be taken to indicate that the Remington autoloading rifle is in any way unsatisfactory.

REAR SIGHTS

WILL you please be so kind as to let me have the benefit of your opinion on the following:

1. Which have you found to be the best rear hunting sight for the .30-'06 Springfield.

2. I note that while you comment favorably on the Lyman No. 103 in THE AMERICAN RIFLEMAN you have since pointed out certain disadvantages. If you have a gun equipped with this one would you have it removed and replaced with another?

I am familiar with the Lyman No. 48 which I formerly used. However, recently on an unexpected offer I obtained a Springfield Sporter equipped with the No. 103. The sight is the only thing about the rifle which I question.

Having never used the No. 103 I examined it. The means of elevating can readily be seen but I am unable to detect where adjustment can be made for windage. How is this done?

Moreover, while the sight can be bent back horizontally on its joint if desired, when it is returned to a vertical position again and locked on the left side *will it remain* thus dependably fixed under all conditions? Again, after the rifle has been sighted in and elevation carefully adjusted can that screw be relied *upon to hold* at the point set?

3. In case of too light a trigger pull what parts would be necessary and what would be the approximate cost of having alterations made for a heavier pull? C. F. S., New Brunswick, N. J.

Answer (by Major Whelen). At the time of writing "The American Rifle" I had had experience with only one No. 103 rear sight, a tool room job on my own rifle. It was and is very satisfactory. But since then experience with these sights on the cocking piece of the Springfield has shown that this method of mounting the sight is unsatisfactory if fine accuracy is desired. I know of no way to prevent this. The cocking piece on the Springfield has considerable looseness as the various parts of the rifle are made with certain tolerances as they should be to allow of interchangeability of these parts, easy functioning, functioning in cold weather without oil, and functioning when sand or dust are present. I know of no way to eradicate this looseness without introducing other objectionable features which may interfere with the free operation of the rifle.

The advantages of an aperture sight mounted nearer to the eye than is the case with the usual receiver sights, such as the Lyman No. 48, are: The aperture appears larger and the rim smaller, interfering less with the vision, and making it possible to catch the aim quicker, hold the aim easier on moving game, and see the sights in poorer lights. With large apertures near the eye one comes to entirely disregard the rear sight in aiming, unconsciously looking through it and centering it, but consciously using only the front sight in aiming. This greatly simplifies and quickens the act of aiming.

These were the reasons which led Mr. Howe and myself to design the Howe-Whelen rear sight which is now being manufactured by the Hoffman Arms Company. I believe it to be the best hunting sight on the market for the Springfield rifle. It is quick, accurate, and strong. Its safety is noiseless and very much quicker to operate than the standard Springfield safety, an important matter from the standpoint of the hunter.

This Howe-Whelen rear sight can be readily fitted to your Springfield. It will be necessary to obtain a new "cocking piece and firing pin rod" which the Hoffman Arms Company can obtain for you. Remove the old cocking piece and firing pin rod with the No. 103 sight attached and relegate it to your spare parts kit. Replace with the new cocking piece and firing pin rod, and the Howe-Whelen sight, then target your rifle, and there you are.

KRAG ACCURACY

SOME time ago I wrote with reference to turning down the bolt handle and removing the military rear sight, on a 7.62 mm Russian Thanks. I got both done, managed to turn the bolt cold with a piece of bronze and a heavy hammer, held the bolt loosely in a vise, got the sight off with a little heating and the careful use of a cold chisel.

With reference to the Krag, I have had an idea that many of these were in rather poor shape, but have noticed a good many inquiring as to the accuracy are told that they will or should shoot into an 8-inch circle at 200 yards. If this is correct they should be considered accurate enough for ordinary hunting purposes.

Am expecting to use the 150-grain bullet in the Russian and No. 80 powder. I do not need the full charge load here and probably never will. Will want a load that will about equal the .32-20 HV, for an occasional long shot at a Jack. What would you suggest?

Speaking of small game rifles, I have had an idea that a .25-20 Savage Sporter, stock nicely checked, light sling No. 42 peep, and ivory or gold bead front, to weigh about 7 pounds, would make an ideal small game rifle. Would like to hear from someone who has tried the combination mentioned. I note that a great many claim the accuracy of this rifle is not up to the standard of other Savage arms. I have a .22 Sporter that will shoot closer than I can hold it. Have never had a chance to thoroughly try this rifle at a range over 50 yards. I shot a pigeon through the body, shooting up an elevator shaft. The bullet, a 22 L.R. N. R. A., went through a 2-inch fir plank, through the pigeon, and tore a fair sized chunk of concrete out where it lit. As near as I know, the pigeon got well, at least he left that place. There were feathers and blood on the ceiling right above him so I know he was hit. Either he had a lot of vitality or else the plank slowed the bullet down so much it just got through him. On the other hand I have killed them dead at 40 or 50 yards with the same cartridge. It took 3 shots Friday to lay out a tough old crow. Have hit a few flying, but never been able to more than wing them.

This country around here is rather thickly settled and a fellow must find a place for the bullet to light before he fires. I used a .25-20 SS Winchester for a long time, but the "Old settlers" made a fuss for fear a cow might be hit that I traded for a .22. That .25-20 sure is a sweet shooter at that.

One more thing and I'll be through. In general what is the condition of the '17 Army .45 revolvers as offered? These look like a dream to me if carried on hikes, mountain trips, etc., where it is not possible or desirable to carry a rifle. I have a little .25 Ortgies "Society gun" straight shooting, but I like one with more wallop to it. Don't know if you can make anything out of this or not. I enjoy THE AMERICAN RIFLEMAN very much and get a lot of kick out of the gun game, and when a fellow has to go on his own as one does here its nice to have some source to turn to for advice. C. M. M., Tilden, Nebraska.

Answer (by Major Whelen). Almost any Krag rifle, unless the barrel is in a horrible condition, ought to shoot ten consecutive shots into a 6-inch circle at 200 yards, provided that first class ammunition is used. No rifle will be accurate without good, properly fitting ammunition. The war time ammunition for the Krag is not good ammunition. Lots of ammunition is made by the various cartridge companies for the Krag, but almost invariably it is now loaded for economy's sake with bullets the igive and bearing of which are designed for the Springfield and not for the Krag, and they do not give particularly good accuracy. I think that it is only by hand loading that the best accuracy can now be obtained from the Krag.

In your Russian rifle try 25 grains of duPont No. 80 powder with the 150-grain bullet. I think that you will get just the load you have been looking for.

The .25-20 Savage rifle would make an excellent small game rifle, provided that you use it only with Winchester ammunition which is loaded with nitro-cellulose powder, and take particular pains in cleaning, using water and a brass brush. The other makes of this ammunition are loaded with Sharpshooter nitro-glycerine powder, and I know of no way in which the bore can be kept free from bad corrosion, even by the most perfect care.

A COAT FOR THE RIFLE SHOOTER

COULD you advise me as to where I could buy a first-class shooting coat? I would like a coat that could be used for both indoor and outdoor shooting. Can these coats be bought with elbow and shoulder pads attached?

Possibly from your National Match and other match experience, you could tell me about the kind of shooting coats which are used by other target shooters. C. S., Erie, Pennsylvania.

Answer (by Major Whelen). I do not know of anyone making rifle shooting coats. The usual custom is for the rifleman to obtain a reasonably priced khaki or "Duxback" Norfolk coat such as is sold in most large sporting goods stores for sportsmen, autmobilists and fishermen. Get the coat plenty loose over the chest, back and in the arm pits. Elbow pads and a shoulder pad of sheepskin with the fleece inside should then be sewed on it. Be sure you lie down in it first and mark just where the point of the elbows come on the sleeve when in the prone position.

The pad for the right elbow need not be so large, say about 8 in. long by 5 inches wide. The pad for the left elbow should extend up the back of the arm almost to the shoulder, and the top of the sheepskin should be rolled over and sewed so as to make a lump which will come just below the gunsling and prevent the gunsling from slipping down on the arm. Make the roll a little below the top of the sheepskin so that above the roll there will still be some of the sheepskin padding to prevent the sling strap from cutting into the back of the arm. The sheepskin shoulder pad should be rolled up and sewed so as to make a sort of ridge on the outer edge to keep the butt of the rifle from slipping off the shoulder. Usually the shoulder pad will accommodate itself better to the shoulder and rifle if this outside, rolled edge be left free and not sewed down to the coat. This also permits folding a towel or similar article and placing it under the sheepskin in case you ever want to do any testing with Magnum rifles of very heavy recoil. Normally the sheepskin with the fleece on is plenty cushion enough for the Springfield rifle.

Ballistic Series

No. 2

Save this page. It is the second of a series giving detailed information regarding some of the more popular WESTERN game cartridges. The target at the right is an actual size reproduction of one of the best groups made with WESTERN .30-06 Lubaloy sporting type bullets, at the last Government Accuracy Test. It shows a mean spread of approximately 1½ inches.

The .30-'06—

Match Accuracy with Sporting Bullets

The use of the .30-06 for long range target work and its increasing favor as a hunting arm has led to the development of many different loads and bullets for this caliber, including highly accurate special target loads. It remained for WESTERN to offer *sporting types* of bullets in this caliber which would give results comparable with the best match ammunition.

In the recent U. S. Government Accuracy Test, WESTERN Lubaloy *sporting type* bullets made the remarkable average of 2.44 inches mean spread for 240 shots at 300 meters (328 yards). Six inch groups at 200 yards were formerly considered good for bullets of this type. Velocities of all types of bullets in this caliber are sufficient to give flat trajectory and good range and penetration.

These factors and the wide variety of loads available in this cartridge in 180 and 220 grain bullets, open point expanding, soft point and full metal patch types, have recently been making this rifle one of the most popular for all kinds of shooting. General ballistic data on the 180 gr. and 220 gr. .30-06 is given below. Detailed information will be gladly furnished upon request.

Bullet Weight—180 gr. and 220 gr.
Type—Boat-tail and O.P.E. soft point and full metal patched, all Lubaloy jacketed.
Ave. Group at 300 yds.—2½ in. (Machine Rest.)
Muzzle Vel.—180 gr., 2720 ft.sec.; 220 gr., 2234 ft.sec.
Vel. at 100 yds.—180 gr., 2520 ft.sec.; 220 gr., 2026 ft.sec.
Muzzle Energy—180 gr., 2956 ft.lbs.; 220 gr., 2446 ft.lbs
Energy at 100 yds.—180 gr., 538 ft.lbs.; 220 gr., 2002 ft. lbs.

Trajectory Height:	180 gr.	220 gr.
Midway of 100 yds.—	.62 in.	.95 in.
Midway of 200 yds.—	2.52 in.	4.20 in.
Midway of 300 yds.—	6.57 in.	9.55 in.

Adapted to the Springfield, Mauser, Griffin and Howe, Hoffman, Pope and Remington rifles of this caliber, and Winchester Model 95 chambered for Model '06 cartridges.

WESTERN CARTRIDGE CO., 525 Broadway, East Alton, Ill.

Ammunition Dope

FREE

The men who perfected the highly accurate WESTERN game cartridges as well as Lubaloy non-fouling bullet jackets, Boat-tail and Open Point Expanding bullets, the .30-30 high velocity and other famous WESTERN developments, will be glad to help you solve any ammunition problems that may be bothering you. A postcard will bring you any information that you may want.

Western

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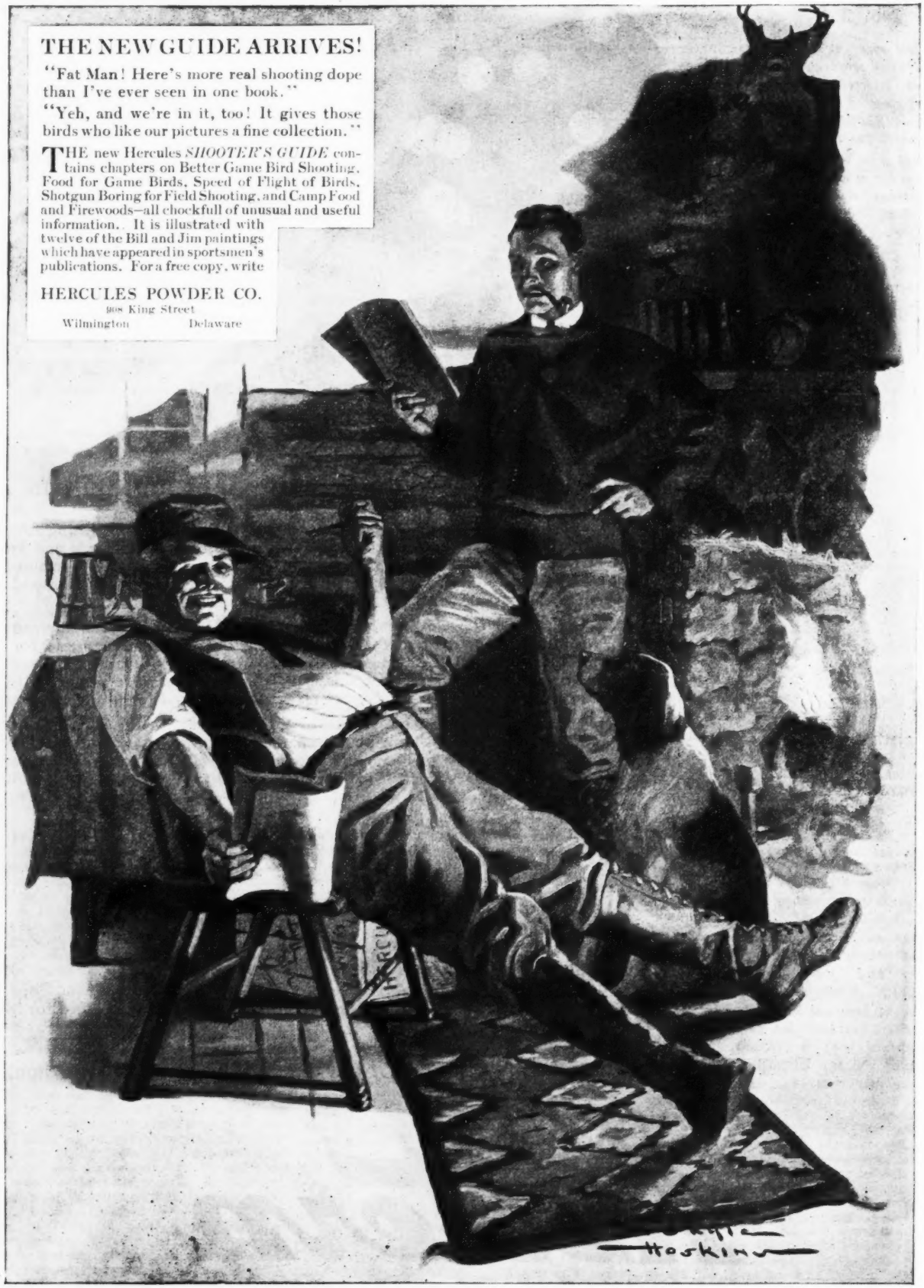
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Lion Number 218

A photograph of Jay Bruce, California's State Lion Hunter and the 218th Mountain Lion -- Cougar, Panther, Puma — he has killed with his COLT Frontier Model 38-40.

"I use no other arm of any kind," Says Jay Bruce.

"It Never Failed," says this great woodsman. And other hunters, sportsmen, shooters—tens of thousands of them— echo, "It Never Failed." In every sort of service COLTS have maintained their reputation for unfailing reliability. COLT Target Models, too, are supreme. Colt New Service Target for heavy loads, Colt Officers' Target for intermediate purposes, Colt Police Positive Target and Colt Automatic Target Pistol in the smaller calibers, have been favorites, always.

Whenever life or sport or reputation as a hunter is at stake no wise sportsman cares to take the risk of an undependable fire arm. No matter how well he may think of other arms, he *knows* his COLT will never fail. And this is not surprising. For three score years COLT Revolvers and Automatic Pistols have met every test of durability, accuracy, reliability and safety. Each sportsman has his favorite COLT and there is a Colt model to fit every hand—every need. In safety features alone COLTS stand head and shoulders above all other fire arms.

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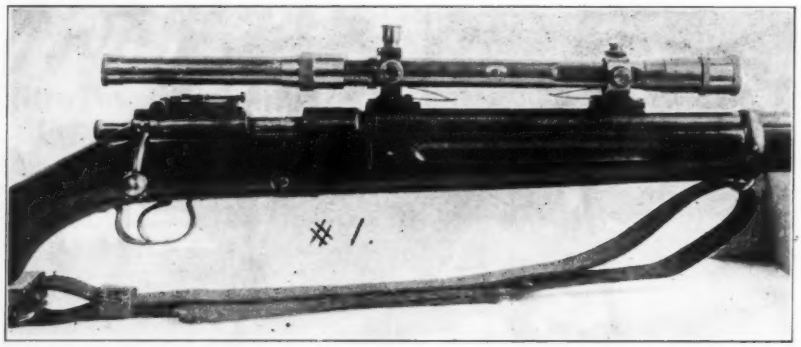

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Do justice to the precision of this fine target rifle and to your own holding ability and eyes. Permit no inferior sighting equipment, iron or scope, to handicap you *this* season.

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No. 2 is the new full round-tube B. & M. 9-Power Scope Sight. Its mounts are B. & M. "D" rear, B. & M. "W" front. The latter is a simple, rugged ring, carrying no adjustments but holding the tube flexibly and firmly at two top bearing points.

No. 1 shows rear mount placed on barrel, leaving rear open sight in place.

No. 2 shows rear mount located on receiver bridge, the rear open sight being removed. Both mounts make use of B. & M. No. 1 dovetail base blocks and strip.

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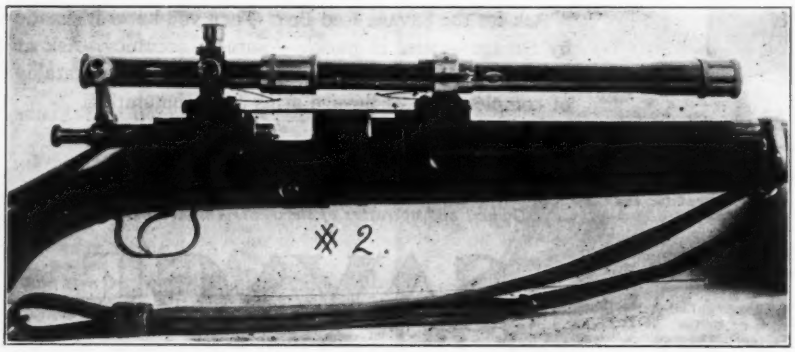

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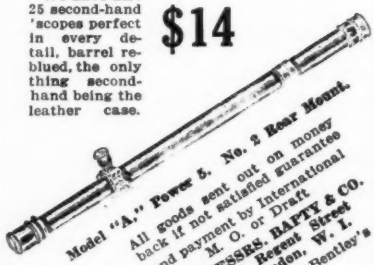

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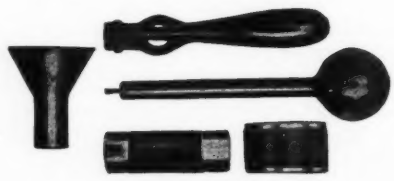

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"FIREARMS OF YESTERDAY" are a specialty with "THE OLD GEORGETOWN GUILD." At all times there are on hand a large number of specimens from which to select examples of early American, Confederate States' and European firearms. Tell us what your collection needs. We will probably be able to help you. The Old Georgetown Guild, 2722 M. St., N.W., Washington, D.C. P

SHIFT WITH THE HOUSE OF SHIFF THE GUNMAN, N. Woodstock, N. H. This is our 54th year, and best. I have never shipped a gun I did not personally back EXCEPT NEW, DIRECT to your order. I never carry because they are cheap but only because they are RIGHT. One charge. One price to ALL. If you have not shipped your stamp, if you are not fighting fanatics, if we have to smuggle our guns as you do a drink THEN SHIFF's NEW YEAR'S MESSAGE to YOU is that it serves YOU WELL AND RIGHT. R

FOR SALE OR TRADE—One Ottaway Spotting Scope. 20-X, open 16¾ inches, closed 6 inches. One Stevens 468 scope and mounts and mounts complete, bluing worn, length 13½ in. Cross wire reticule. One Biascope 6-X, used but in fine condition. Several used over and under trap and field guns. WANT—Postcard size Grafiax Camera, complete, single and double full choke, trap guns, also full choke pump guns. Wm. F. Smith, 5619 North 4th St., Philadelphia, Pennsylvania. Q

FOR SALE—Winchester Target Rifle .32-40, Pope breech loading barrel with interchangeable .22 Winchester sport barrel, double set trigger, cheek piece, Schuetzen butt plate, action cut down for easy .22 loading. All in fine condition. Bullet mold, 100 shells, 250 bullets, bullet sizer, bullet seater, $45.00. Fred V. Ronn, 1512 Amsterdam Ave., New York City. 951

FOR SALE—Match Barrel by Niedner, A number 3, 30-inch .30-06, made for Springfield action, complete with front sight base and front sight. Accuracy guaranteed. Cost $39.20, will ship for $25.00. R. Throssel, 20 N. 34th St., Billings, Montana. 952

WANTED—Patterson, Dragoon and Bisley Colts. Kentucky Flint Rifles. North Berlin, North and Chaney, Richmond and Harper Ferry Pistols. Wesson 1855 22 cal. revolvers. Specify in detail, cals., length of barrels and condition. S. H. Croft, 33rd & Market St., Phila., Pa. S

FOR SALE—New and slightly used Grafiax, kodaks, lenses, binoculars, telescopes Zeiss. Goerz, Hensoldt, Busch, reasonably priced, good firearms taken in trade. National Camera Exchange, 29 So. 5th St., Minneapolis, Minn. T

We have fought the fanatics to draw this round. Let us prepare for an intelegent offensive NOW. Ship your stamp and SHIFT WITH THE HOUSE OF SHIFF the GUNMAN. North Woodstock, New Hampshire. U

MAKE YOUR old guns like new with new method gun bluer, large size can, enough for five guns postpaid for $1.00. New Method Gun Company, Dept. Z-4, Bradford, Pa. V

WANTED—Ideal or Bond lubricator of the later type and must be reasonable. .30-06 gas check molds wanted. Orville Dale, Salina, Kan. 953

WANTED—Winchester 52, Reising, and Remington .22. What have you? Box 5, R. 5, Mt. Carmel, Illinois. 959

FOR SALE—Super Hetrodyne, 8 Tube Model C 7 by Experimenters Information Service. Savage rifle 303 Model 1899, 26-inch barrel. Lionel F. Vaughn, P.O. Box 226-A, Gilboa, N. Y. 960

WANTED—Double English rifle, .400 or .416 or .465 or .470 caliber Cordite. Address with full particulars as to make, condition, and price. G. L. Mirick, 1 Baker Court, Cincinnati, O. 956

FOR SALE OR TRADE—Stevens 414 special finish, Lyman 103 Stevens 210 sights, fast lock, perfect, $25.00, or trade for Winchester 52 in good condition. C. H. Kline, Woolrich, Pa. 965

TRADE—.38 Winchester Model 1873, new barrel. Krag rifle, good. .44 S. A. Army Colt's 7½ in. barrel nickel. WANT—Winchester musket .22 L. R. binoculars, .22 S. & W. or Colt's target pistol. What have you? S. A. McEwen, Erwin, Tennessee. 957

FOR SALE OR EXCHANGE—.30 Luger with holster, new, $18.50. .32 Automatic Colt, fine, $16.00. 3-tube Radio, Baldwin Loud Speaker unit, Push-Pull amplifier, new, lot extra parts, transformers, etc. WANT—.25-20 or .32-20 rifle. Also large bore rifle, scope sights and mounts—shotgun. Write me. W. W. McGowan, 1906 Hillside Ave., Springfield, Ohio. 958

FOR SALE OR EXCHANGE—New, Winchester Model 1895, chambered for the .30 Government '06 cartridge, take down shot gun butt, Lyman 41 Receiver sight, G.H.E. Parker, 12-28 open and full .22-32 Smith & Wesson 6-inch target sights, .22 Auto. Colt. Write for prices and particulars. H. F. Crofut, Old Forge, N. Y. 963

FOR SALE—Super Fox duck gun ejector, single trigger, barrel 30 inches with full stock, 14¾ x 11¾ x 2¼. Cost $156.00, will sell for $88.50. .256 Newton, fired 400 times, peep on bolt, Silvers pad, cost $82.00, sell for $38.50. .25-36 Marlin, highest grade, fired 100 times, Lyman peep, sell for $38.00. Thos. J. McCullough, R. 4, Box 7-H, Santa Ana, Calif. 949

FOR SALE—Stock of Rand-McNally & Co. "Atlas of the World" below cost, latest Government census, county map of every State in the U. S., double page maps of Europe, one as it was in 1914, one as it was in 1920, 208 pages, bound in green cloth, lettered in gold, 11 x 14 inches, should be in every office and home, regular $5.00 book, sent P.P. paid insured for $2.75. M. M. Conlon, 608 Old National Bank Building, Spokane, Washington. 966

FOR SALE—Fine Target Revolver. .38 Smith & Wesson with 8-inch Stevens-Pope barrel, adjustable rear, ivory bead front sight. Perfect condition inside and out. Complete reloading outfit consisting of Ideal No. 3 tool, mold, Ideal sizing and lubricating machine, 750 empty shells, 600 bullets, 2100 primers. A rare chance to get a pre-war revolver with a famous Stevens-Pope hand made barrel. L. B. Rush, 253 River Ave., Spokane, Washington. 955

FOR SALE—900 Savage make, 87 grain soft point .250-3000 bullets, fresh from factory, at only $2.00 per hundred. Orders accepted for 100 or more. NOTICE—I am glad to announce that I am now mid-western representative for WESTERN TOOL & COPPER WORKS Bullets of all kinds, the finest made, prices reasonable. Some exclusive types not made by anyone else. Send me your order and save time on delivery. Descriptive price list free. Write for it. Geo. A. Goeke, 15 East Main St., Waukon, Iowa. 954

FOR SALE—20 gauge Lefever, new, $26.00. 12 ga. Light Double French Robust, new, a beautiful gun, $85.00. Combination over and under 20 ga., .22 H. P., new condition, perfect by Adolph, cost about five hundred, $250.00. .250-3000 bolt action Savage new Lyman peep on bolt, $50.00. .45-70 Winchester, full magazine, extra light weight, $50.00. Winchester-Lee Straight pull Lyman on bolt P.G. stock, checked $40.00. Model 12A .22 cal. Remington, new, $20.00. .25-35 Winchester Carbine two-thirds magazine, ring left off S. G. butt, new, $35.00. .30-30 Winchester one-half magazine. Nickel steel barrel, 3-Lyman sights, $22.00. Win. M-73 .44 cal. P.G.S., checked nice gun, $22.00. M-73 Winchester carbine, good repair, $12.00. M-92, nearly new. Win. carbine, $22.00. .32 Win. Special perfect barrel 3-Marble sights, $25.00. .30-30 Win. 24 inch barrel, perfect, full mag., $25.00. .30 cal. Standard rifle, good shape, $15. .38-55 Winch. Carbine, very accurate, $10.00. .44-40 Marlin Carbine, 15 in. barrel Chile police gun, nearly new, $20.00. .22 Win. musket, fine sights, heavy frame, $20.00. .303 Savage gun, new barrel, new action, Marble peep, $28.00. .25-20 Win. Single Shot, nearly new, Lyman sights, $22.00. .45-70 Win. Ex. Light weight, P.G.S. checked selected take down stock cracked can be repaired, good, $25.00. HXR 20 ga. single new, $10.00. 12 ga. Hopkins & Allen, nearly new, $8.00. Several Winchesters and Marlins full magazine guns, all in good working order, $7.00 each. .38 S. & W. breakdown, new, $20.00. Stevens No. 43 diamond model pistol, 6 inches, $5.00. Colt Army Special .32-20, $20.00. Colt New Service target perfect .44 S. & W. special, 7½ inches, $40.00. .25 Colt Automatic $10.00. .25 cal. Waffenfabrik Automatic pistol, new, $18.00. H. & R. .38 C. F. Revolver, new, $8.50. H. & R. .32 C. F. Revolver, 6 inch target grips, new, $10.00. .44 S. & W. Special 7½ inch inclosed ejector rod perfect, $40.00. 2 fine Hamilton watches, nearly new, to trade for guns Very fine Kenwood sleeping bag, used once, $25. WANT—Loading tools in trade on guns. Krag carbine with fine stock, .40-90 Sharps straight, with fine stock set triggers. Might trade for other guns in first class shape. Inclose stamp please. Information given on any of above. A. W. Reed, Greenville Jct., Maine. 944

FOR SALE—Colt's .38 blue, 6 inch bbl., new condition, $20.00. S. & W. .32 blue, never shot, 4 inch barrel, $20.00. S. & W. .38 nickel pearl stock, 6 inch bbl., new condition, $23.50. S.&W. .38 Nickel Square butt, 6 in., barrel new condition, $24.00. Colt's .32, blue, new condition, 4 inch. barrel, $19.50. S. & W. blue 4 in. barrel new condition, bluing worn, $18.00. Samuel Kates, S. W. Cor. 20th & South St., Philadelphia Pa. 946

TRADE OR FOR SALE—One pair 10 x 45 glasses made for U. S. by Bausch & Lomb, $50.00, OR TRADE for 8 power light weight Zeiss binoculars in good shape. Also barometer with thermometer attached, $25.00. Made in France. H. E. Priess, Care Gen. Del., Stapleton, Staten Island, N. Y. 964

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WANTED—Steven's Pistols. .25 cal., in target condition, or .22 cal. with shot out barrel, but good action. Reasonable price. O. A. Johnson, 1329 E. 72nd St., Chicago, Ill. 938

TRADE—Winchester Model 1895 rifle, caliber .30-40 Army. Excellent for a Springfield in excellent condition. P. L. Cardwell, Denton, Texas. 939

WANTED—A Sharps Borchardt .45-70 rifle. Must be in good condition and moderate price. S. B. Wetherald, Sandy Springs, Md. 968

FOR SALE—.38 Colt military auto., Heiser holster and extra magazine, fine condition. $26 prepaid. Money order. Gerald Forrest, Simi, California. 975

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FOR SALE OR TRADE—Star-gauged Springfield. Rear sight and wood on fore-end cut where scope fitted, otherwise perfect. $25.00 or trade for .25 caliber. Wm. F. Stembler, Capitol Heights, Maryland. 967

FOR SALE—One Winchester 5-A Scope, with mounts, A-1 shape, $20.00. One 414 Stevens, fine, $12.00. One Colt Repeating Rifle, .40-60 cal., one-half magazine perfect inside and out, Winchester reloading tool, $30.00. Earl A. Barnard, 15 Elliott St., Brattleboro, Vt. 936

FOR SALE—.25 cal. Niedner H. P .rifle, Winchester S. S. action, single set trigger, 28 inch No. 3 barrel, base blocks attached, pistol grip stock, shotgun butt. All in gun crank condition, 120 shells with same. Price $25.00. One Malcolm 6 power scope, 16 inches long, without mounts. A fine scope, perfect condition, $12.00. N H. Roberts, 175 Washington St., Berlin, New Hampshire. 976

FOR SALE—Parker D.H.E. auto ejectors, Lyman ivory bead sights nearly new, shot about 200 times, 16 ga imp. cyl. & full, 28 inches 6¼ lbs., stock 14 x 1⅝ x 2⅛, cost $167.50, ask $115. Parker D. H. E., same condition, same dimensions and sights as D.H.E. except 6½ lb. cylinder & mod., cost $97.25, take $70.00. Reising .22 auto., new and perfect, 1/16 inch ivory bead front sight, extra magazine, $28.00. Colt .45 auto., perfect inside, blue worn off a little, good U. S. holster and 90 cartridges, $29.50. Model 1895 Winchester, .30 U. S. cal., little rusty, $20. Smith & Wesson .22 heavy frame target revolver, new condition, patridge and gold bead combination sights, $27.00. Marble game getter, 12 inch shoulder, holster, factory condition, $22, only shot 25 times. G. H. Cummings, Colebrook, New Hampshire. 948

FOR SALE—Remington-Hepburn .38-72 Win. cartridge, Scheutzen butt, Vernier peep sights, 30 inch barrel, fine, $13.00. Frank Wesson .44 cal. rim or center fire, peep sights, nice stock, very good, $9.00. .40 caliber cap lock target rifle by Geo. E. Goulcher. Maple stock curly, set triggers, mould, starter, etc., perfect, $17.50. Josh Goulcher .36 cal., 24 ga. double barrel gun, side by side, good looker, fine condition, peep sights, patch box, walnut stock, $8.50. 9 ga. percussion double, looks fine, would shoot, for decoration, $2.50. Smooth bore full stock Kentucky, lock poor, nice brass patch box, for decoration only, $2.50. S. & W. .44 S.A., 6 inch blue, 6 shot, wood stocks, fine, $12.00. Rem. Smoot .38 cal. R.F. 5 shot, 4 inch barrel, rod ejector, pearl stocks, highly engraved, gold plated, fine, $11.00. Rem. Smoot 5 shot, 3 inch barrel, .30 cal. R.F. nickeled, good, $3.50. Have cartridges with this gun. Remington alteration .38 cal. R.F., 5 shot, 4½ in. barrel, oct., original bluing. Sheard sight, rosewood stocks, barrel perfect, $9.00. Colt .45 D. A. Army rebuilt to chamber .32-20. Has sheard sight, 7½ inch nickel steel barrel, special shape grip, refinished blue, new condition, absolutely accurate. Heavy big gun, pleasant to shoot, $23.00. F. A. Hodges 148 State St., Albany, N. Y. 971

FOR SALE—Savage .22 hi-power, take-down, A-1, $22.00. 1895 Winchester .30-06, receiver sight, good outside, perfect inside, $30.00. 1886 Winchester .33 W.C.F. A-1, $25.00. Champion 10 ga. single, 27 inch auto. ejector, fair, $3.50. Colt Officers Model, .38 Spl. 7½ inch, pearl stocks, new, $32.00. Colt S.A. .44-40, 7½ inch, new, $24.00. Colt S.A. .38-40, 7½ inch, fine, $18.00. Colt S.A. .44-40, 7½ inch, good, $14.00. Colt New Service .45, 7½ inch, new, $24.00. Colt .45 Automatic, latest model, new, $25.00. Colt New Service, .44-40, 5½ inch, fine, $18.00. Colt .32 Automatic, good, $12.00. Colt .25 Automatic, good, $9.00. Colt .38 Automatic, 6 inch, good, $16.50. S. & W. .38 Spl., 6 inch, new, $22.00. S. & W. .38 Spl. 4 in., fine, $18.00. 1,000 Springfield '06 cartridges, $25.00. WANT—Barrel for '03 Springfield rifle; Colt (Bisley) revolver, any caliber. Ray Nelson, Roy, Utah. 969

FOR SALE—950 Belding & Mull .32-20 115 gr. lead bullets 70 cents per hundred, cost 85 cents, sized and lubricated. 200 new primed cases .32-20 Western made, smokeless primers, $1.25 per hundred. 140 new Western make primed empty .250-3000 cases $2.75 for the lot. 1,500 U.M.C. 6½ smokeless primers $2.90 per hundred. Hoffman .250-3000 rifle, 24 inch half-rib barrel, 3 folding leaf sights on rib, Lyman No. 48 peep, Ivory bead front. Short Mauser action, trap in butt plate with compartments in stock. Circassian walnut stock with cheek piece, Buffalo horn forearm tip. This rifle is brand new and perfect, cost $225.00, will sell for $165.00. Geo. A. Goeke, 15 East Main St., Waukon, Iowa. 978

FOR SALE—Books, "Modern American Rifles" $2.00. 'Firearms in American History," Vol. I, Sawyer, $3.50. "Notes on the Rifle," Fremantle. 1896. Poor copy but complete, $1.00. Ideal Handbook No. 23, 50 cents. Lyman Sight No. 103 for Springfield cocking piece, $2.50. Postage on above extra. Martini Enfield Carbine, S.s. .303 British foreend cut down and checkered. Barrel first class, $8.00. Francis, Crawford Bay, British Columbia. 970

10 Per Cent discount on Winchester and Savage rifles, and Modern-Bond reloading tools. Winchester 1895, retail price $49.25, to N.R.A. members $44.32. Savage 99-G, retail price $51 to N.R.A. members $45.90. Special on Lyman No. 48 for Springfield and Krag, with disc, tap and drill, $9.50 postpaid. Arthur E. Anderson, Fullerton, North Dakota. 985

SELL OR EXCHANGE—High-grade R. R. watch, 21 Jewel Sangamo, adjusted to six positions, in 25 yr. Wadsworth dust-proof case, would exchange for high-grade rifle or shot gun. M. M. Conlon, 608 Old National Bank Bldg., Spokane, Wash. 972

FOR SALE—.22 Winchester and Ideal reloading tools, four moulds, three shot shell crimpers, and one Pope measure, the lot $40.00. WANT—Winchester S. S. action, Winchester scope and Winchester .32-20 Model 53. M. Jarrett, 800 Washington St., Williamsport, Pa. 987

SELL—TRADE—Bolt .250 Savage, select oil finished stock, bolt peep, extremely accurate, perfect condition. WANT .30 Sporting Springfield, perfect, S. G. and accurate. .30-06 Winchester or $55.00. Hubert Z. Halliwell, Schroon Lake, N. Y. 988

WANTED—Ideal or Modern Bond Powder measure, also .30 caliber bullet moulds. State number. C. A. Pickering, 36 Miles Ave., Middletown, Connecticut. 986

FOR SALE—Lyman No. 34 windgauge receiver sight, with top and drill for Krag. Brand new, $5.00. Chas. W. Williams, 1 Holland Ave., Batavia, N. Y. 992

FOR SALE—Choice collection of modern rifles practically brand new, at one half cost. Write Sidney Maranov, Room 705, 305 Broadway, New ork City. 982

WANTED—Britsh Lee Enfield. Must be perfect. J. H. Puffer, E. Conneaut, Ohio. 984

WANTED—.22 caliber rifle barrel. In good shape and at a reasonable price. Merle L. Orr, Box 53, RFD 1, Wilkinsburg, Pa. 980

WILL TRADE—Winchester 95 carbine, .30-06 A-1 condition. Lyman receiver sight, adjustable for range and windage, gold bead front. WANT .22 caliber Springfield 1922, or Winchester 52 Lyman Sight. S. E. Orvis, Pacific Coast Torpedo Station, Keyport, Washington. 983

FOR SALE—Colt's .45 cal. automatic, commercial gun, like new with Patridge sights, two magazines, Heiser holster, cleaning rod and brass brushes, and some ammunition. Complete outfit cheap. Write for price. Jos. R. Kleingwenther, 6623 Edmund St., Tacony, Pa. 993

FOR SALE—Olympic model .22 cal. 10 inch Smith & Wesson S.S. pistol, in factory grease and box. With Heiser special holster. Guaranteed 3 inch groups at 50 yds. Best offer or trade for other arm. Ernest Fumasoli, 4808 Kenmore Ave., Chicago, Ill.

TRADE—.25 Colt Auto. pistol, in fair shape. WANT .22 pistol, revolver or rifle. Also want to buy sporting stock for Russian rifle, Russian sporter, Lee Enfield sporter. Trade 3 tube Cockaday radio for rifle scope, telescope, binoculars or what. P. O. Box 2151, Sta. A., Pasadena, California 977

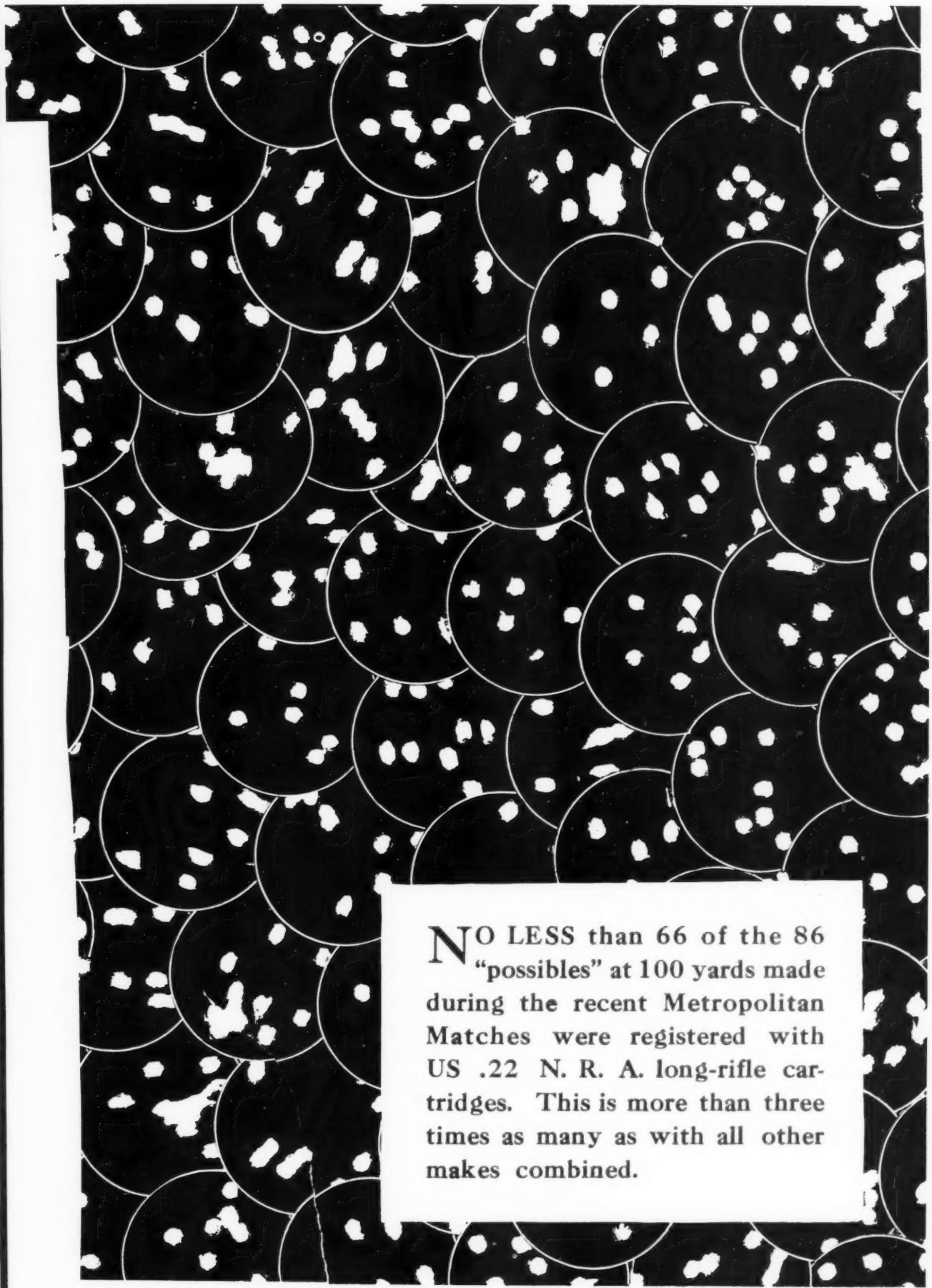
FOR SALE—We have several Ballard Scheutzen rifles ranging in price from $30.00 to $60.00. One B.S.A. .22 caliber rifle, fitted with Winchester telescope, $50.00. Write to us for specifications on Mauser and Mannlicher bolt action rifles, cal. 8 mm. John Meunier Gun Co., 272 West Water St., Milwaukee, Wis. 994

FOR SALE—New .38 Special Colt, six inch blued, $25.00. Smith & Wesson .38 with 6 inch barrel, new type sights, $26.00. WANT Springfield Sporting rifle, plain or fancy, National Match Springfield, Savage .250-3000 Lever. All must be in good condition as to bore and outside finish. Loading tools for .30-06. T. C. Barrier, Box 52, Statesville, North Carolina. 989

FOR SALE—Mauser pre-war sporting .30-06, matted barrel double trigger, cheek piece, Circassian stock, never fired, $15.00. Remington Lee .30-40 bolt, military 30 inch barrel, new condition, $25.00. Winchester Model 92, .25-20 24 inch oct. barrel, never fired, double set triggers, Lyman peep rear, ivory bead front sight, $25.00. W. English, Navy Yard, Washington, D. C. 990

FOR SALE—One Niedner double set trigger for Springfield, mounted in guard. With special sear. One Model 22 pistol grip stock, aluminum offhand butt plate, fitted for No. 3 barrel. One cork adjustable palm rest, $25.00 for the lot. One Niedner breech block for Winchester S. S. C.F. rifle, fitted with Mann-Niedner firing pin, $7.00. One No. 1 Ideal shot shell bench loading machine, with automatic shot and powder measure, No. 2 Star Ideal shell crimper for power on hand use, $15.00. J. J. Turner, 2419 16th Ave., South, Minneapolis, Minn. 991

FOR SALE—One Smith & Wesson .22 S.S. 10 inches, action good, barrel poor, $8.00. One Smith & Wesson .38 Special, 6 inches, Patridge type sights, gun in very good condition. With holster. $23.50. One .45-70 Springfield, 11 cartridges, $2.50. One Krag sporter, with sling, 22 inch barrel, amateur stock, $8.00. One Krag sporter, 30 inch barrel, good condition, $10.00. One 1912 12 ga. Winchester pump gun, in wood case, 28 inch full choke barrel, recoil pad, almost new, $38.00. One Bond Reloading tool for .30-40 and .30-06, new, $9.00. One Bond Bullet Mould B-3111000-1265, $3.50. One Frankford Mould .30 caliber round ball, 75 cents. One Photographer's scale, can split grains, new, $3.50. One Vest Pocket Kodak B. R. lens, leather case, portrait attachment and color filter, $6.00. Cash with order, charges prepaid, or C.O.D. charges collect. Money returned if not satisfied. Warren O. Dipman, 539 Lodge Ave., Toledo, O. 981



NO LESS than 66 of the 86 "possibles" at 100 yards made during the recent Metropolitan Matches were registered with US .22 N. R. A. long-rifle cartridges. This is more than three times as many as with all other makes combined.

"I will return bearing my shield—*or upon it!*"

The ancient Spartan soldier, before a desperate encounter, shouted this slogan of victory or death.

* * * *

It was the 29th of June, 1918—in the Montdidier Sector. The Division Commander had called for a raid and prisoners.

Company D, 26th Infantry begged for the job, and got it.

The raiding party under Lieutenant Wesley Freml, D.S.C., started with a rush, and "leaning up" closely against its barrage, had reached the German lines before the Hun counter-battery work began . . . down into the dugouts, smoking out the Boche—through communicating trenches —thrusting, firing and bombing!

Lieutenant Freml was in the thick of the fight. His coolness and bravery had been an inspiration to his men. Suddenly, a Boche jumped out of the bushes and discharged a pistol into Lieutenant Freml's chest! He died instantly. With a roar, one of the privates who was close behind the Lieutenant, bayoneted the man.

Thirty-three prisoners had now been taken, and the raiding party slowly returned to its own trenches, having lost but two killed and four wounded. The body of the victorious leader was brought back by his men. He had returned, "carried upon his shield."

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